

EXHIBIT 1

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Richmond Division**

ePLUS, INC.,)
)
)
) Civil Action No. 3:09-cv-620
Plaintiff,)
)
)
v.)
)
)
LAWSON SOFTWARE, INC.)
)
)
)
Defendant.)

**REPORT OF EXPERT MICHAEL I. SHAMOS, PH.D, J.D.
CONCERNING INVALIDITY**

BACKGROUND & QUALIFICATIONS

1. My name is Michael I. Shamos. I hold the title of Distinguished Career Professor in the School of Computer Science at Carnegie Mellon University in Pittsburgh, Pennsylvania. I was a founder and Co-Director of the Institute for eCommerce at Carnegie Mellon and I now direct a graduate degree program in eBusiness Technologies. My résumé is attached as Exhibit 2 to this report.

2. I teach graduate courses at Carnegie Mellon in Electronic Commerce, including eCommerce Technology, Electronic Payment Systems, Electronic Voting and eCommerce Law and Regulation and have done so since 1999. In Fall 2009 I am teaching Law of Computer Technology.

3. From 1979-1987 I was the founder and president of two computer software development companies in Pittsburgh, Pennsylvania, Unilogic, Ltd. and Lexeme Corporation.

4. I am an attorney admitted to practice in Pennsylvania and have been admitted to the Bar of the U.S. Patent and Trademark Office since 1981. I have not been asked to offer any opinions on patent law in this action.

5. I have previously testified in a number of cases concerning computer technology. My résumé in Exhibit 2 contains a list of cases in which I have testified in the last ten years.

6. I have been retained as a technical expert by the law firm of Merchant & Gould LLP on behalf of Lawson Software, Inc. (“Lawson”) in this action.

7. I have been engaged through Expert Engagements LLC (“EE”), a firm that locates expert services for law firms. EE charges \$550 per hour for my regular services, of which I receive \$495. EE charges \$750 per hour for time during which I am under oath, of which I receive \$675. I am one of the owners of EE. No part of my compensation is dependent on the outcome of this case.

8. I have been asked by counsel for Lawson to offer an expert opinion on the validity of a total of 13 claims which I understand ePlus has chosen to assert in this case from the patents in suit: claim 1 of Johnson et al. U.S. Patent 6,505,172 (the '172 Patent), claims 1, 2, 6, 9, 21, 22

and 29 of Johnson et al. U.S. Patent 6,055,516 (the '516 Patent), and claims 3, 6, 26, 28 and 29 of Johnson et al. U.S. Patent 6,023,673 (the '673 Patent), which have been asserted against Lawson (collectively, the "Asserted Claims" of the "Patents"). In connection with my analysis, I have reviewed the Patents, their prosecution histories and the documents listed in Exhibit 1, attached hereto.

9. I have utilized the claim constructions set forth in the Court's Memorandum Opinion dated April 30, 2010 in arriving at my opinions.

10. The individuals named as inventors in the Patents are referred to collectively herein as the "Applicants." All the Patents name the same set of inventors.

11. In this report, where I have cited a reference as prior art, either the reference predates the filing date of the Patent or I have been informed by counsel for Defendants that Defendants intend to prove at trial that the reference is prior art as to the Patent. I have assumed that the asserted patents are entitled to priority as of their filing dates. I have not made any independent determination of relative dates of invention or publication.

12. It may be necessary for me to revise or supplement this report based on material subsequently presented, and I reserve the right to do so. I may also present demonstrative evidence at trial, and I reserve the right to do so.

13. It may be necessary for me to revise or supplement this report, or file a supplement or responsive report, based on any responsive report of Plaintiff, and I reserve the right to do so. In particular, if Plaintiff in any of its expert reports presents new evidence or theories on infringement or validity, including secondary considerations of nonobviousness, I reserve the right to file a supplemental report.

14. I further understand that, as of the date this report is to be served, fact and expert discovery are continuing, and on that basis it may be necessary for me to supplement this report.

SUMMARY OF OPINIONS

15. All of the Asserted Claims are invalid for anticipation and/or obviousness or are invalid on non-art grounds. A chart summarizing the grounds for invalidity is attached hereto as Exhibit 4, which is an integral part of this report.

LEGAL PRINCIPLES

16. As an expert assisting the Court in determining claim validity and enablement, I am obliged to follow existing law. Among the legal principles I have relied upon in this report are:

- a. For a claim to be anticipated, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim.
- b. When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art.
- c. Inherent anticipation requires that the missing descriptive material is “necessarily present,” not merely probably or possibly present, in the prior art.
- d. A claim is invalid for obviousness if “differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a).
- e. In determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under 35 U.S.C. §103. According to the Supreme Court, the proper question is whether a designer of ordinary skill in the art, “facing the wide range of needs created by developments in the field,” would have seen an “obvious benefit” to the solutions tried by the applicant.
- f. If one of ordinary skill in the art can implement a predictable variation prompted by market forces or design incentives, such a variation is obvious. If a technique has been used to improve one device, and one of ordinary skill in the art would recognize that it would improve

similar devices in the same way, using the technique is obvious unless its actual application is beyond ordinary skill. Stated differently, the proper question is whether one of ordinary skill, facing the wide range of needs created by developments in the field of endeavor, would have seen a benefit to combining the teachings of the prior art.

g. Where there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, it is obvious to pursue the known options within the grasp of one of ordinary skill.

h. In many cases a person of ordinary skill will be able to fit the teachings of multiple prior art references together like pieces of a puzzle. Such a combination is more likely to be obvious where it simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement

i. Contemporaneous development of similar variations of a device or method by other parties is indicative of obviousness.

j. In establishing obviousness, one must avoid the “temptation to read into the prior art the teachings of the invention in issue” and “guard against slipping into the use of hindsight.”

k. In evaluating the issue of obviousness, secondary considerations of non-obviousness should be considered including considering whether any of the following factors exist: (1) the invention's commercial success, (2) long felt but unresolved needs, (3) the failure of others, (4) skepticism by experts, (5) praise by others, (6) teaching away by others, (7) recognition of a problem, and (8) copying of the invention by competitors. However, for secondary considerations to be relevant, there must be a “nexus” between the merits of the claimed invention and the evidence of secondary considerations. In some cases, the evidence of obviousness is so strong that it cannot be overcome by evidence of secondary considerations.

l. The meaning of every term used in a claim should be apparent from the prior art or from the specification and drawings at the time the application is filed. Applicants need not confine themselves to the terminology used in the prior art, but are required to make clear and

precise the terms that are used to define the invention whereby the metes and bounds of the claimed invention can be ascertained.

m. Art that is analogous to the subject matter of the patent may properly be used as an obviousness reference. “A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.”

n. A claim not supported by written description in the specification, such that the specification does not clearly allow persons of ordinary skill in the art to recognize that the inventors invented what is claimed, is invalid under 35 U.S.C. §112, first paragraph.

o. A claim for which the specification fails to set forth the manner and process of making and using it in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains is invalid for lack of enablement under 35 U.S.C. §112, first paragraph

p. Reciting both an apparatus and a method of using that apparatus in a single claim (a so-called “hybrid claim”) renders the claim invalid indefinite under 35 U.S.C. §112(2). IPXL Holdings, L.L.C. v Amazon.com, Inc., 430 F.3d 1377, 1384 (Fed. Cir. 2005). Likewise, MPEP §2173.05(p). The reason is that it is not clear whether infringement occurs when the apparatus is made or when it is used according to the method.

q. A claim whose meaning cannot be ascertained is invalid as indefinite under 35 U.S.C. §112, second paragraph.

r. A claim in means-plus-function form for which the only disclosed structure in the specification is a general purpose computer is invalid if the specification fails to disclose an algorithm for performing the claimed function. Blackboard, Inc. v. Desire2Learn, Inc., 574 F.3d 1371, 1384 (Fed. Cir. 2009).

s. To be patentable, a claimed process must relate either to a machine or transformation in order to pass the requirements of §101. (“A claimed process is surely patent-eligible under §101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article

into a different state or thing.”) This is generally known as the “machine or transformation test” of *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (en banc).

LEVEL OF SKILL IN THE ART

17. The Asserted Claims of the Patents are drawn to electronic sourcing systems that permit searching of parts catalogs and preparing requisitions and purchase orders. In order to make and use the claimed inventions without undue experimentation, one of skill in the art would need an undergraduate degree in computer science, or equivalent work experience, and, in addition, two years’ experience designing or programming electronic ordering systems.

THE PATENTS-IN-SUIT

18. All three of the patents-in-suit are directed to the same general invention. The ’516 Patent is a continuation in the application that issued as the ’683 Patent, and the ’172 Patent is a division of the application that issued as the ’516 patent.

19. The patents are entitled “Electronic Sourcing System” and relate to “systems and methods for interfacing product information, such as is typically found in vendor catalogs . . . , and requisition/purchasing systems and methods that may use the results of searches of product information.” (’516 Patent, 1:10-15). The “Background of the Invention” section acknowledges that, at the time the patent application was filed, there were a number of known electronic requisition/purchasing systems as well as computer systems capable of searching product catalog databases. (’516 Patent, 1:15-2:22). In the “Summary of the Invention,” the specification describes all of the objects of the invention as including the transfer of information between a catalog search system and a requisition system:

- a. “to provide an electronic sourcing method and system that provides a user with the capability of searching a database containing data (including product/vendor identification, and other product information) relating to items available from at least two product catalogs, and the capability of transferring the product information for desired catalog items obtained as a result of the search to a

requisition/purchasing system for use in generating a requisition including entries for the desired catalog items.” (’516 Patent, 2:51-60).

- b. “It is also an object of this invention to provide an electronic sourcing system that provides a means for bi-directionally transferring information between a requisition/purchasing system that may use the results of a search of such product information, and a means for searching large volumes of product information such as would be included in a vendor product catalog.” (’516 Patent, 2:61-67)
- c. “It is a further object of this invention to provide an electronic sourcing system capable of creating an order list including desired catalog items located as the result of such a database search, and transferring that order list to a requisition/purchasing system for generating a requisition including entries for the desired catalog items.” (’516 Patent, 3:1-6).

20. Thus, the Applicants acknowledged that the invention constituted the bringing together of two systems; a database/catalog searching system and a requisition/purchasing system. In particular, the Applicants disclosed that the preferred embodiment of the invention was the combination of their own prior art Requisition and Inventory Management program (“RIMS”) system taught in the ’989 Patent (which was only an application at the time they first filed for the Patents) with the prior art catalog search product from IBM known as TV/2. “Electronic sourcing system 5 also includes a requisition/ purchasing system 40, preferably but not necessarily the Fisher RIMS system, and a search program 50 that is capable of searching through large volumes of information quickly and accurately. Preferably but not necessarily, the Technical Viewer 2 search program (“TV /2”), available from IBM, is used as search program 50.” (’516 Patent, 4:6-12). “Preferably, a user will start the electronic sourcing system 5 from Fisher RIMS system 40. Requisitioning on Fisher RIMS system 40 in context of the electronic sourcing system 5 of the present invention is illustrated in pertinent part in FIG. 2 (and is fully described in U.S. Pat. No. 5,712,989).” (’516 Patent, 6:45-49).

21. However, the specification fails to reveal that the suggestion to combine a procurement system such as Fisher RIMS with TV/2 is expressly disclosed in the TV/2 prior art literature itself. The file histories of the Patents also fail to show that the Applicants informed the PTO that the RIMS system as disclosed in the ‘989 Patent was in the prior art. Thus, the PTO did not have information needed in order for it to consider whether the claims were allowable in view of either the RIMS system alone, or the RIMS system in combination with the TV/2 system. Consistent with this conclusion, the ‘989 patent is not identified on any of the Patents as prior art considered by the PTO. Thus, there is no indication that the PTO ever considered the patentability of the claims of the Patents in view of the prior art RIMS system.

22. More specifically, Figure 1A illustrates that the electronic sourcing system 5 of the patents-in-suit includes hardware components such as a Host Computer 10 and a Local Computer 20 (that includes standard hardware peripheral devices Monitor 22, Printer 26 and Keyboard 24). Electronic sourcing system 5 also includes software components; Host Computer 10 operates Host Databases 11, and Local Computer 20 executes an operating system 32 (OS/2) and a Requisition and Inventory Management program 40 (RIMS) (that includes all programs identified with numerals in the “40’s” such as Requisition, Inventory and Customer Specific Databases 42A, 42B and 42C, respectively, as well as Requisition Management Program 44A (REQI), Inventory Sourcing program 44B and Requisition Maintenance Program 44C). Other significant software on Local Computer 20 includes search program 50 (TV/2) for performing catalog searching and Catalog Database 36 in which certain product information is maintained. (’516 Patent, 4:6-50).

23. In general, the electronic sourcing system described in the patents-in-suit enables a user to search a database or catalog set for a particular item, select desired items from the search results to generate an order list, generate a requisition containing the selected items on the order list, check the pricing and inventory status of the selected items, and generate one or more purchase orders to vendors for the selected items. (’516 patent, Abstract). A product search can be performed in two ways: either by using the functionality of the RIMS program 40 (Exhibit F,

'989 Patent, 8:40-9:2) or by transmitting a request to search program 50 (TV/2) ('516 Patent, 6:45-49).

24. Following a search of the database(s), an order list may be produced from user selections of matching items found in the database. ('516 Patent, 9:40-45). Using the hit list 47, a user may select a particular item and add it to an order list. ('516 Patent, 10:22-25, 11:39-42). The order list can include information such as (1) vendor number; (2) vendor part (catalog) number; (3) product description; and (4) quantity, for example. ('516 Patent, 11:64-67). In addition, a requisition for selected items may be built. ('516 Patent, 13:5-15:38). This requisition can then be processed into a purchase order. ('516 Patent, 15:39-41).

THE FILE HISTORIES OF THE PATENTS-IN-SUIT

25. The '683 patent was filed with 78 claims. In a first Office Action, the Patent Office rejected claims 1-78 under 35 U.S.C. §103 based on U.S. Patent Nos. 5,319,542 (King), 4,984,155 (Geier) and 4,992,940 (Dworkin). In response, the Applicants cancelled claims 1-78 and added claims 79-129. The new claims included the “capability of selecting particular catalogs or sub catalogs they wish to search and the ability to search among all selected catalogs with a single query,” which the Applicants argued represented a distinct advantage over King where the customer appears to be limited to searching the Private Catalog or the Public catalog and cannot search selected portions of the catalog. The Applicants also argued that another advantage of the claimed invention was the ability to generate multiple purchase orders to multiple suppliers, which they argued was not taught by King, Dworkin, or Geier. Finally, the Applicants argued an advantage of the claimed invention was the ability to order a selected item from an alternative supplier by cross-referencing the suppliers’ respective catalog numbers so that purchase orders need not be generated for out-of-stock items.

26. In a second non-final Office Action, the Patent Office rejected claims 79, 80, 82-86, 88-97, 99, 100, 108, 109, 111-115, 117-120, 121-125, 127, and 128 under 35 U.S.C. §102(b) based on Dworkin., but noted that the cited art (King, Dworkin and Geier) do not show: 1) converting items found in one vendor’s catalog to another vendor; and 2) searching only portions

of a catalog database. In this Office Action, the Patent Office allowed claims 101-107 and 129 and noted that claims 81, 87, 98, 110, 116, 121 and 126 contained allowable subject matter. It is noteworthy that the '989 Patent clearly discloses that the RIMS system shows converting items found in one vendor's catalog to another vendor's catalog. ('989, 31:60-34-67). The '989 Patent also discloses searching portions of a catalog database. (See. e.g., '989, 8:40-61). This confirms that the examiner did not understand that the RIMS system or the disclosure of the application that led to the '989 patent was prior art. Had he understood that, he would have had to conclude that the prior art did disclose these features.

27. In response to second Office Action, the Applicants cancelled claims 88 and 89, amended many of the claims (including asserted claims 81 and 87 (by adding means for converting), 108 (by adding determining whether items are available in inventory), and 110 (added converting to an item with a different source)). In response, the Patent Office issued a notice of allowance for the pending claims.

28. The '516 Patent was filed with 78 claims. In a Preliminary Amendment, the Applicants cancelled claims 1-78 and added claims 79-120. In a first Office Action, the Patent Office allowed claims 91-102, noted that claims 88, 89, and 113 contain allowable subject matter, and rejected claims 79-87, 80, 103-112, and 114-120 under 35 U.S.C. §102(b) based on Dworkin. The Patent Office stated that the cited art (Dworkin) does not show converting items found in one vendor's catalog to another vendor.

29. In response to the first Office Action, the Applicants cancelled claims 84-86, 88, 103-109, and 111-113 and amended several claims including asserted claims 79 (by adding a matching vendor identification code with a subset of collection of catalogs that includes catalogs from different suppliers that sell corresponding items), 110 (by adding a cross-reference table matching equivalent items from different sources) and added new claim 121 (that included a cross-reference table). In response, the Patent Office issued a notice of allowance for the pending claims.

30. The '172 Patent was filed with 78 claims. In a Preliminary Amendment, the Applicants cancelled claims 1-78 and added claim 79. In a first Office Action, the Patent Office rejected claim 79 under 35 U.S.C. §102(b) based on Dworkin and issued a double patenting rejection based on MPEP §804 and *In re Schneller*. This rejection relates to the situation where patent protection for the particular subject matter was “fully disclosed in and covered by the claims of the patent, [and] would be extended by allowance of the appealed claims. If there is no valid excuse or mitigating circumstances making it either reasonable or equitable to make an exception, and where there is no terminal disclaimer, the rule against "double patenting" must be applied. (MPEP §804).

31. In response, the Applicants argued that “a requisition only identifies needed items but the purchase order authorizes a vendor/supplier to supply an item or items to satisfy a need” and that Dworkin does not teach creating requisition orders, but only of creating an order for an item. The Applicants argued in contrast the claimed invention teaches a single requisition can include multiple items and be sourced to different vendors. However in a supplemental amendment, the Applicants cancelled claim 79 because it was identical to claim 19 of the '683 patent. The Applicants also added claims 81-84.

32. In a final Office Action, the Patent Office rejected claims 81-84 based on double patenting over the '683 patent and reiterated its rejection based on *In re Schneller*. In response, the Applicants stated that “inadvertently omitted the claimed subject matter from the '683 patent” and filed terminal disclaimer. In response, the Patent Office issued a notice of allowance for the pending claims.

33. A Request for *Ex Parte* Reexamination of claims 26-45 of the '683 Patent was filed on September 15, 2006. That Request listed four prior art references the raised a substantial new question of patentability: the P.O. Writer Manual; the Practical Guide to SABRE; the J-CON Manual; and the Gateway Printed Publications. On October 28, 2006, the Patent Office granted the Request because it found that each of these prior art references anticipated and renders obvious each of the claims for which reexamination was requested. In a Final Office Action

dated January 8, 2009, the Patent Office rejected all of the claims being reexamined. Despite the patentee's arguments to the contrary, each prior art reference was determined to qualify as prior art. Each claim was then found to be either anticipated or rendered obvious by the P.O. Writer Manual, the Practical Guide to SABRE, the J-CON Manual, and the Gateway Printed Publications.

34. A Request for *Inter Partes* Reexamination of claims 1-5 (all the claims) of the '172 Patent was filed on July 10, 2009. The Request listed six prior art references that raised substantial new questions of patentability: U.S. Patent No. 6,963,551, the '989 Patent, the P.O. Writer Manual; the Practical Guide to SABRE; the J-CON Manual; and the Gateway Manual. The Patent Office granted the Request because it found that each of these prior art references anticipated and renders obvious each of the claims for which reexamination was requested. On October 23, 2009, the Patent Office rejected all five claims finding that claims 1 and 3-5 were anticipated by the '989 Patent and that claims 1-5 were anticipated by each of the P.O. Writer Manual, the Practical Guide to SABRE, the J-CON Manual, and the Gateway Manual. It is noteworthy that, once the '989 Patent was identified as prior art, the PTO relied on it as raising new questions of patentability and to reject the claims it had previously allowed.

35. A Request for *Inter Partes* Reexamination of claims 1-29 (all the claims) of the '516 Patent was filed on November 12, 2009. In the January 15, 2010 Order Granting Reexamination of the '516 patent ("'516 Reexam Order"), the Patent Office found that the following references were prior art and raised a substantial new question of patentability as to all claims of the '516 patent: Claims 1-29 of the '516 Patent to be unpatentable over the Johnson '989, King '542, P.O. Writer; Practical Guide to SABRE; and J-CON. It is again noteworthy that, once the '989 Patent was identified as prior art, the PTO relied on it as raising new questions of patentability.

36. In the order granting reexamination, the Patent Office found that the originally-allowable features that appear to be found in the limitations of patented claims 1, 16, and 21 relate to converting items found in one vendor's catalog to equivalent products in another vendor's catalog. ('516 Reexam Order at 7). Regarding claim 1, the previously-allowable

feature was the element requiring “a catalog selection protocol...including matching a vendor identification code with a subset of said collection of catalogs, wherein said subset of catalogs includes both a vendor catalog from a predetermined vendor and a second catalog from a predetermined third party that is one of a manufacturer and a competing vendor, said predetermined third party selling items corresponding to items in said vendor catalog.” ('516 Reexam Order at 7). Regarding claim 9, the examiner believed that the previously-allowable feature was the element requiring “said first item and said second item being generally equivalent, and wherein a selection of one identification code from one of said first and second catalogs provides the other identification code from the other of said catalogs,” because this limitation relates to “converting data relating to said item from said first catalog to data relating to said item from said second catalog.” ('516 Reexam Order at 7). He further found that the previously-allowable features of patented claim 16 appear to be in the limitation that requires “converting means for converting data relating to said item from said first catalog to data relating to said item from said second catalog.” ('516 Reexam Order at 8). And the previously-allowable features of independent claim 21 appear to be in the limitation that requires “said each of at least two catalogs include a generally equivalent item from a different source, said requisition module working in combination with said catalog searching module to determine multiple sources for said item; wherein said multiple sources is limited by said catalog searching module providing a match according to said user-generated criteria, said search module criteria and a determination system that located items are generally equivalent; and wherein said determination system includes a cross reference table matching an identification code from a first located item with a second identification code from a second located item.” ('516 Reexam Order at 8).

THE ASSERTED CLAIMS

37. Claim 1 of the '172 patent is drawn to an apparatus including a database with items from at least two vendors and five means elements for (1) entering product information to specify an item; (2) searching for items matching the specification; (3) generating an order list by

selecting from among the items matching the specification; (4) building a requisition from the order list; and (5) generating purchase orders from the requisition. Claim 1 of the '172 patent claims no more than the conventional process of sourcing from multiple vendors.

38. Independent claims 1, 9, 21 and 29 of the '516 patent are all apparatus claims for an electronic sourcing system. Generally these system claims are drawn to apparatus for selecting catalogs to be searched for an first item, and determining which items in other catalogs are "generally equivalent" to the first item. Various limitations recite structures for determining this equivalence and/or converting catalog numbers between such equivalent items.

39. Independent claims 3 and 6 of the '683 Patent are drawn to electronic sourcing systems comprising means elements for performing generally the same functions as recited in the '516 claims.

40. Independent claim 26 of the '683 Patent is drawn to a method reciting the functions performed by the apparatus of '172 claim 1, and adding the step of determining whether an item is in inventory.

41. Independent claim 28 of the '683 Patent is drawn to a method version of '683 claim 6. Claim 29, which depends from claim 28, adds the step of determining whether an item is in inventory.

LACK OF WRITTEN DESCRIPTION

42. All of the Asserted Claims except'683 claim 26 fail to find support in the relevant specification. One of ordinary skill in the art would not understand clearly that the Applicants invented the subject matter of the Asserted Claims, hence they fail to meet the written description requirement of 35 U.S.C. §112.

43. Claim 1 of the '172 patent recites "means for processing the requisition to generate purchase orders for said selected matching items." There is no written description of, or corresponding structure for, any "means for processing the requisition to generate purchase orders" other than the disclosure of a general purpose computer (e.g. local computer 20) and the specification does not provide the algorithm used to perform the claimed function.

44. Claim 1 of the '516 Patent recites “a first set of pre-determined criteria associated with said collection of catalogs” and “a second set of pre-determined criteria associated with items from each of said catalogs.” There is no written description of any criteria or how they are to be determined, let alone “pre-determined.” There is further no distinction made in the specification between any “first set of pre-determined criteria” and any “second set of pre-determined criteria.”

45. The patents-in-suit disclose that the inventors invented a system and method for transferring information between a searchable collection of catalogs and a requisition/purchasing system. The summary of the invention states:

- a. “it is an object of this invention to . . . provide a user with the capability of searching . . . at least two vendor product catalogs, and the capability of transferring the product information for desired catalog items obtained as a result of the search to a requisition/purchasing system . . .”
- b. “It is also an object of this invention to provide . . . a means for bi-directionally transferring information between a requisition/purchasing system . . . and a means for searching large volumes of product information such as would be included in a vendor product catalog. . . .”
- c. “It is a further object of this invention to provide . . . an order list including desired catalog items located as the result of such a database search, and transferring that order list to a requisition/purchasing system . . .”

46. Of the 78 claims originally filed in the '683 patent, all required building a requisition and generating or issuing a purchase order. Original claims 1-75 all also required building a requisition using data from the search. Original claims 76-78 required generating a requisition and generating or issuing a purchase order, but arguably are less clear about requiring the requisition to include data obtained from the search, even though the specification makes clear that a requisition system is a necessary element of the invention, as every paragraph in the summary of the invention talks about transferring information between the search system and the

requisition system. Consistent with this, the specifications of the Patents state that it is “an important feature of the present invention that a requisition may be filled by searching and selecting from a catalog database of items, inventory sourced, and the resulting requisition then divided into one or more purchase orders.” ‘683 15:50-54. However, claims 1, 2, 6, 9 and 29 of the '516 patent do not recite a requisition system (for example, claim 9 of the '516 patent). These claims are not supported by a written description in the specification and are invalid under 35 U.S.C. §112, first paragraph. Gentry Gallery, Inc. v. Berkline Corp., 134 F.3d 1473 (Fed. Cir. 1998).

47. Claim 1 of the '516 Patent recites “a catalog selection protocol, said catalog selection protocol relying on said first set of predetermined criteria to select less than said entire collection of catalogs, and including matching a vendor identification code with a subset of said collection of catalogs, wherein said subset of catalogs includes both a vendor catalog from a predetermined vendor and a second catalog from a predetermined third party that is one of a manufacturer and a competing vendor, said predetermined third party selling items corresponding to items in said vendor catalog.” There is no written description of any “catalog selection protocol,” except possibly the manual process described at 9:56-10:11, and a manual process cannot serve as an apparatus element. There is further no written description of any use of “criteria” in selecting catalogs. The specification also fails to describe a vendor identification code associated with more than a vendor, a vendor and a manufacturer, or a vendor and a predetermined third party. Hence there is no description of “matching a vendor identification code with a subset of said collection of catalogs.”

48. Claims 2 and 6 of the '516 Patent, which depend from claim 1, are invalid as depending from a claim lacking written description.

49. Claim 9 of the '516 Patent recites “a second identification code associated with a second item in a second catalog, said first item and said second item being generally equivalent.” There is no written description of “generally equivalent” (or even “equivalent”). The term is not used in the specification at all.

50. Claim 9 of the '516 Patent recites "wherein a selection of one identification code from one of said first and second catalogs provides the other identification code from the other of said catalogs." There is no written description of "provides the other identification code" in the specification.

51. Claim 21 of the '516 Patent recites "a requisition module including data fields, user-generated criteria entered into at least one of said data fields to generate at least partial criteria corresponding to a desired item." There is no written description of "user-generated criteria" or how they might be entered. There is no written description of generating "at least partial criteria" from "user-generated criteria."

52. Claim 21 of the '516 Patent further recites "a catalog selection criteria used to select less than said entire collection." There is no written description of any catalog selection criteria or the use of any such criteria in the specification.

53. Claim 21 of the '516 Patent further recites "said searching module being used to generate additional search-module criteria for said data fields of said requisition module." There is no written description of any "additional search-module criteria."

54. Claim 21 of the '516 Patent also contains the limitation, "said purchase order generation module creating multiple purchase orders from a single requisition created with said user-generated criteria and said search-module criteria." There is no written description of any "user-generated criteria" or "search-module criteria." Further, there is no written description of, or corresponding structure for, any such module other than the disclosure of a general purpose computer (e.g. local computer 20) and the specification does not provide the algorithm used to perform the claimed function.

55. Claim 21 of the '516 Patent further contains the limitation, "wherein each of at least two catalogs include a generally equivalent item from a different source." As discussed above in connection with '516 claim 9, there is no written description of "generally equivalent" or "generally equivalent item."

56. Claim 21 of the '516 Patent likewise recites "a determination system that located items are generally equivalent." There is no written description of any "determination system that located items are generally equivalent," and, as previously discussed, no written description of "generally equivalent" items.

57. Claim 22 of the '516 Patent depends from claim 21 and is invalid as depending from a claim lacking written description.

58. Claim 29 of the '516 Patent recites "a catalog selection protocol, said catalog selection protocol relying on said first set of predetermined criteria to select less than said entire collection of catalogs." There is no written description of any "catalog selection protocol," except possibly the manual process described at 9:56-10:11, and a manual process cannot serve as an apparatus element. There is further no written description of any use of "criteria" in selecting catalogs.

59. Claims 3 and 6 of the '683 Patent recite "means for converting data related to a selected matching item and an associated source to data relating to an item and a different source." There is no written description of, or corresponding structure for, any "means for converting" other than the disclosure of general purpose computers (host computer 10) and the specification does not provide the algorithm used to perform the claimed function.

60. Claims 3 and 6 of the '683 patent recite "means for processing the requisition to generate one or more purchase orders for the selected matching items." There is no written description of, or corresponding structure for, any "means for processing the requisition to generate . . . purchase orders" other than the disclosure of a general purpose computer (e.g. local computer 20) and the specification does not provide the algorithm used to perform the claimed function.

61. Claim 28 of the '683 Patent recites the step of "converting data relating to a selected matching item and an associated source to data relating to an item and a different source." There is no written description of any such "step of converting."

62. Claim 29 of the '683 Patent depends from claim 28 and is invalid as depending from a claim lacking written description.

LACK OF ENABLEMENT

63. All the Asserted Claims of the '516 Patent fail to meet the enablement requirement of 35 U.S.C. §112.

64. Claim 1 of the '516 Patent recites "a catalog selection protocol, said catalog selection protocol relying on said first set of predetermined criteria to select less than said entire collection of catalogs, and including matching a vendor identification code with a subset of said collection of catalogs, wherein said subset of catalogs includes both a vendor catalog from a predetermined vendor and a second catalog from a predetermined third party that is one of a manufacturer and a competing vendor, said predetermined third party selling items corresponding to items in said vendor catalog." Not only is there no written description of any "catalog selection protocol," but one of skill in the art would not be able to make and use any such "catalog selection protocol" performed by computer. The specification only describes matching a vendor identification code with a catalog from a single vendor and does not enable matching a vendor identification code with catalogs from more than vendor, a vendor and a manufacturer, or a vendor and a predetermined third party.

65. Claims 2 and 6 of the '516 Patent depend from claim 1 and are invalid as depending from a claim lacking enablement.

66. Claim 9 of the '516 Patent recites "a second identification code associated with a second item in a second catalog, said first item and said second item being generally equivalent." Determining whether items are "generally equivalent" is not enabled by the specification. Further, it would not have been clear to one of skill in the art what "generally equivalent" even means.

67. Claim 21 of the '516 Patent recites "a requisition module including data fields, user-generated criteria entered into at least one of said data fields to generate at least partial criteria

corresponding to a desired item.” There is teaching of how to generate “at least partial criteria corresponding to a desired item.”

68. Claim 21 of the ’516 Patent also recites “a catalog selection criteria used to select less than said entire collection “ There is no enablement of any “catalog selection criteria” that would be used to restrict the set of catalogs, and it would not be clear to one of skill in the art what such criteria might be.

69. Claim 21 of the ’516 Patent further recites “a determination system that located items are generally equivalent.” Determining whether items are “generally equivalent” is not enabled by the specification, nor is any such determination system enabled.

70. Claim 22 of the ’516 Patent depends from claim 21 and is invalid as depending from a claim that is not enabled.

71. Claim 29 of the ’516 Patent recites “a catalog selection protocol” similar to that of ’516 claim 1 and is not enabled for the same reason.

HYBRID CLAIMS

72. Several of the Asserted Claims are hybrid claims impermissibly mixing apparatus elements and method steps and thus do not fall within any of the classes of patentable subject matter under 35 U.S.C. §101.

73. Claim 1 of the ’516 Patent recites “a catalog selection protocol, said catalog selection protocol relying on said first set of predetermined criteria to select less than said entire collection of catalogs, and including matching a vendor identification code with a subset of said collection of catalogs, wherein said subset of catalogs includes both a vendor catalog from a predetermined vendor and a second catalog from a predetermined third party that is one of a manufacturer and a competing vendor, said predetermined third party selling items corresponding to items in said vendor catalog.” This is an apparatus claim that recites the method steps of “relying on said first set of predetermined criteria to select less than said entire collection of catalogs,” “matching a vendor identification code with a subset of said collection of catalogs” and “said predetermined

third party selling items corresponding to items in said vendor catalog.” Furthermore, a “catalog selection protocol” is not an apparatus element at all under either party’s construction.

74. Claim 2 and 6 of the ’516 Patent depend from claim 1 and are invalid as depending from a non-statutory hybrid claim.

75. Claim 9 of the ’516 Patent is invalid under 35 U.S.C. §101 as not reciting statutory subject matter. The claim is not tied to any particular machine or device. A “collection of catalogs stored in an electronic format” reads on a compact disk, which is not a machine or device. The remaining elements are not tied in any way to the “collection of catalogs.”

76. Claim 21 of the ’516 Patent recites “said searching module being used to generate additional search-module criteria for said data fields of said requisition module.” This is an apparatus claim that recites a method step.

77. Claim 21 of the ’516 Patent also recites “a multiple purchase order generation module, said purchase order generation module creating multiple purchase orders from a single requisition created with said user-generated criteria and said search-module criteria.” This is an apparatus claim that recites the method step of “creating multiple purchase orders.”

78. Claim 21 of the ’516 Patent further recites “said requisition module working in combination with said catalog searching module to determine multiple sources for said item.” This is an apparatus claim that recites the method step of “working in combination … to determine multiple sources for said item.”

79. Claim 22 of the ’516 Patent depends from claim 21 and therefore also an invalid hybrid claim.

80. Claim 29 of the ’516 Patent recites “a catalog selection protocol, said catalog selection protocol relying on said first set of predetermined criteria to select less than said entire collection of catalogs, and including matching a vendor identification code with a subset of said collection of catalogs, wherein said subset of catalogs includes both a vendor catalog from a predetermined vendor and a second catalog from a predetermined third party.” This is an apparatus claim that recites the method steps of “relying on said first set of predetermined

criteria” and “including matching a vendor identification code with a subset of said collection of catalogs.” Furthermore, a “catalog selection protocol” is not an apparatus element at all under either party’s construction.

INDEFINITENESS OF THE ASSERTED CLAIMS

81. All the Asserted Claims fail to meet the definiteness requirement of 35 U.S.C. §112 and are therefore invalid.

82. Claim 1 of the ’172 Patent recites “a database containing data relating to items associated with at least two vendors maintained so that selected portions of the database may be searched separately.” This limitation is fatally ambiguous. It is not clear whether each item must be associated with at least two vendors or whether it is merely sufficient to have two different items associated with different vendors. The specification of the ’172 Patent provides no material that would assist in disambiguating this claim. A potential infringer would accordingly have no way of determining whether its database would fall within the scope of the claim.

83. Claim 1 of the ’172 Patent recites “means for generating an order list that includes at least one matching item selected by said means for searching.” However “said means for searching” does not perform any selection – it merely searches. Therefore, the “at least one matching item selected by said means for searching” does not refer to any element at all.

84. Claim 1 of the ’516 Patent recites “a first set of pre-determined criteria associated with said collection of catalogs.” However, no time or event is recited before which such a determination of criteria must be made. Therefore, a potential infringer would be unable to establish whether criteria employed by its system were “pre-determined” and might thus fall within the scope of claim 1. There is no basis in the claim (or the specification) for distinguishing “pre-determined criteria” from simply “criteria.”

85. Claim 1 of the ’516 Patent further contains the limitation “wherein said subset of catalogs includes both a vendor catalog from a predetermined vendor and a second catalog from a predetermined third party that is one of a manufacturer and a competing vendor.” The term

“predetermined” is indefinite in both of the phrases “predetermined vendor” and “predetermined third party” because no time or event is recited before which such a determination must be made. Therefore, a potential infringer would be unable to establish whether its vendors or third parties system were “predetermined” and might thus fall within the scope of claim 1. There is no basis in the claim (or the specification) for distinguishing “predetermined vendor” from “vendor” or “predetermined third party” from “third party.”

86. Claims 2 and 6 of the ’516 Patent depend from indefinite claim 1 and thus are also indefinite.

87. Claim 9 of the ’516 Patent recites the limitation “said first item and said second item being generally equivalent.” The term “generally equivalent” is indefinite, since it is not clear whether it means “similar,” “interchangeable,” “functionally identical” or something else. The specification uses the term but does not define it. Therefore a potential infringer would be unable to determine whether its system identified “generally equivalent items.” There is further no basis in the claim (or the specification) for distinguishing “generally equivalent” from “equivalent.”

88. Claim 21 of the ’516 Patent contains the limitation “wherein each of at least two catalogs include a generally equivalent item from a different source.” As discussed above, the term “generally equivalent” is indefinite. The limitation is also indefinite for another reason. It is unclear whether “different source” means a third source different from the sources of the two catalogs, or whether it is sufficient for each catalog to include a generally equivalent item from the other catalog (of the two catalogs).

89. Claim 22 of the ’516 Patent depends from indefinite claim 21 and thus is also indefinite. It also contains the limitation, “an identical identification code for each of said located items.” This term is indefinite. It could mean a code indicating that items are not merely equivalent but are identical, or it could mean that all items found to be equivalent are marked with identical codes. There is no basis in the specification for disambiguating the term.

90. Claim 29 of the '516 Patent recites "a first set of pre-determined criteria associated with said collection of catalogs." This term is insolubly ambiguous as discussed above in connection with "pre-determined" in '516 claim 1.

91. Claim 29 of the '516 Patent also recites "wherein said subset of catalogs includes both a vendor catalog from a predetermined vendor and a second catalog from a predetermined third party." This term is insolubly ambiguous as discussed above in connection with "predetermined vendor" and "predetermined third party" in '516 claim 1.

92. Claim 3 of the '683 Patent recites "at least two product catalogs containing data relating to items associated with the respective sources." The term "the respective sources" has no antecedent in the claim. Even if the limitation is asserted to contain a typographical error and that "the respective sources" should be replaced by "their respective sources," that does not solve the problem because the catalogs are not claimed to have sources.

93. Claim 3 of the '683 Patent recites "means for selecting the product catalogs to search," which also lacks antecedent basis. It is not clear whether "the product catalogs to be searched" refers to all of the "at least two product catalogs containing data relating to items associated with the respective sources," which is itself ambiguous, or whether it refers to some undefined subset of the "at least two product catalogs."

94. Claim 6 of the '683 Patent recites "a database containing data relating to items associated with at least two sources." This limitation is ambiguous because it is not clear whether all the items in the database must be associated with at least two sources or whether it is merely sufficient simply to have two different items associated with different sources. The specification of the '683 Patent provides no material that would assist in disambiguating this claim. A potential infringer would accordingly have no way of determining whether its database would fall within the scope of the claim.

95. Claim 6 of the '683 Patent further recites a "means for searching for matching items in the database." The term "matching" has no meaning outside the context of search or matching

criteria, and these are not recited in the claim. It cannot be determined what it means for two items to “match.”

96. Claims 26 and 28 of the ’683 Patent recites a first step of “maintaining at least two products catalogs on a database containing data relating to items associated with the respective sources.” The term “the respective sources” has no antecedent basis and is indefinite as discussed above in connection with ’683 claim 3.

97. Claims 26 and 28 of the ’683 Patent recites the step of “selecting the product catalogs to search.” The phrase “the product catalogs to search” has no antecedent basis and it is not clear whether “the catalogs to search” refers to the “at least two products catalogs on a database” or some subset of them. A potential infringer would accordingly have no way of determining whether its database would fall within the scope of the claim.

98. Claims 26 and 29 of the ’683 Patent recites the step of “determining whether a selected matching item is available in inventory.” This phrase is indefinite because is it not clear whose inventory is meant, whether it refers to the user’s own inventory or the inventory of the “respective source.” Furthermore, an item may be in multiple inventories.

99. Each Asserted Claim is indefinite.

ANTICIPATION AND OBVIOUSNESS OF THE ASSERTED CLAIMS

100. In performing my analysis, I reviewed numerous items of prior art, located anticipating references and utilized express suggestions in the prior art to combine technologies, such as the suggestion to use advertising display systems in elevators, as a basis for opining that certain claims are obvious. Further, I applied appropriate legal standards, listed earlier, which include the *John Deere* factors and *KSR* principles concerning obviousness.

101. In particular, I have relied on at least the following items of prior art, which I am informed qualify as prior art at least as set forth below:

Prior Art Reference	Type of Prior Art?
1. Fisher Scientific Requisition and Inventory Management System (“RIMS system”) (described in U.S. Patent 5,712,989 and the RIMS brochure)	Known or used – 102(a) On sale or public use – 102(b)

Prior Art Reference	Type of Prior Art?
a. U.S. Patent 5,712,989 ("Johnson '989")	102(e) patent
b. RIMS brochure	102(b) publication
2. IBM Technical Viewer/2 system ("IBM TV/2 system") (described in several documents)	Known or used – 102(a) On sale or public use – 102(b)
a. TV/2 General Information brochure	102(b) publication
b. TV/2 brochure	102(b) publication
3. U.S. Patent No. 4,992,940 ("Dworkin '940")	102(b) patent
4. U.S. Patent No. U.S. Patent No. 5,319,542 ("King Jr. '542")	102(a) patent
5. US 5,694,551 ("Doyle '551")	102(e) patent
6. Gateway 2000/MRO Version (described in the Gateway Manual)	102(b) publication
7. J-Con System (described in the J-Con manual)	Known or used – 102(a) On sale or public use – 102(b)
a. J-Con Manual	102(a) publication
8. P.O. Writer Plus system (described in the P.O. Writer Plus Version 10 manual)	Known or used – 102(a) On sale or public use – 102(b)
a. P.O. Writer Plus Version 10 manual	102(b) publication
9. SABRE system (described in the SABRE Practical Guide)	102(b) publication
10. Lawson V. 6 system (described in several documents)	Known or used – 102(a) On sale or public use – 102(b)
a. Lawson Inventory Control v. 6 Manual	102(a) publication
b. Lawson Requisitions V. 6 Manual	102(a) publication
c. Lawson Purchase Order V. 6 Manual	102(a) publication
11. Lawson V. 5 system	Known or used – 102(a) On sale or public use – 102(b)

102. Exhibit 3, which is an integral part of this report, contains a claim chart demonstrating the invalidity of each Asserted Claim. Exhibit 3 is a spreadsheet in which the rows are claim elements and steps and the columns are prior art references. The cell corresponding to an element and a reference contains text if the element is disclosed in the reference or is obvious in light of the reference. The color coding of Exhibit 3 is explained at the top of the spreadsheet.

103. Exhibit 3 also contains matter from Lawson's interrogatories concerning invalidity, which are included in columns that are distinct from my opinions. I adopt the prior art citations

from Lawson's interrogatories, but I do not necessarily adopt the opinions expressed in the interrogatories concerning which claims are invalid in light of which references. On that issue I have expressed my own opinion in columns containing headings beginning "Shamos Opinion."

104. To the extent that any reference listed in this report as anticipating any of the Asserted Claims is not deemed to be anticipating, it is my opinion that any missing element or step would have been obvious in light of the art referenced in this report with the motivation to combine as explained herein.

105. Although the identified art is cited herein as relevant to invalidity, the fact that these systems existed in the prior art may well be relevant to the case in other ways. For example, the existence of non-infringing alternatives may be relevant to damages. I do not opine on these other potential grounds for relevance, but understand my analysis of the prior art may be used for other purposes.

106. A condensed summary of the opinions contained in Exhibit 3 can be found in Exhibit 4, which is also an integral part of this report. The color coding in Exhibit 4 differs slightly from that of Exhibit 3. In Exhibit 3, cells corresponding to claim elements are colored individually, based on whether the element is anticipated, obvious or not disclosed. In Exhibit 4, the cells corresponding to elements of a claim are colored only if the entire claim is anticipated (green) or obvious (yellow).

THE PRIOR ART

Electronic Sourcing Systems

107. The prior art of electronic sourcing systems is long and extensive. Traditionally, distributors and suppliers, such as American Hospital Supply Corporation (AHSC), sold their products using field salespeople, who worked from their homes and called directly on their customers (e.g. hospitals and other organizations). Orders were generally taken in person by the salesperson, who would then mail the orders to company headquarters. (L0340561). This was time consuming, slow and costly. In 1957, AHSC began to automate its order entry and purchasing system by installing IBM 632 tab-card billing machines in its distribution centers.

Orders received at the centers would be keypunched, and the cards were fed through the billing machines. A packing list for the warehouse was produced, as was a summary card for the accounts receivable system. The line time cards from the order were sent on to the home office for sales analysis. (L0340561).

108. In the early 1960's one of AHSC's West Coast offices began having difficulty servicing a large hospital customer. Orders were frequently delivered late and incomplete, creating problems for both the customer and AHSC. In response, they developed the "Tel-American" system which was an automated system for keeping track of inventory using an IBM 1001 Dataphone and card punches. AHSC's West Coast office manager put an IBM 1001 Dataphone in the hospital's purchasing department and attached an IBM 026 card punch in the AHSC distribution center to a phone line. The hospital was given a box of prepunched cards-one for each item purchased from AHSC. The cards were physically placed on the shelves of the hospital's stockroom, each card stuck between boxes of supplies at the point where more stock should be ordered. When the box above the card was taken from the stockroom, the prepunched card was added to the pile of items to be ordered. On a regular schedule the hospital connected the 1001 Dataphone to the 026 card punch via telephone. Each card was fed through the Dataphone, causing a duplicate to be punched by the 026 at the AHSC distribution center. The result was a duplicate deck representing the hospital's order. This deck was fed through the 632 billing machine and the order process continued as usual. The hospital was able to speed up communications and thus would reduce its inventory. Additionally, the Tel-American system also allowed for hospitals to use their own internal item number system and to match these internal part numbers to the supplier's corresponding item numbers. (L0343531). Orders were more accurate and more timely. (L0340561).

109. In the mid 1970s, AHSC's laboratory manufacturing division, TekPro, designed and built a much faster device to read and transmit data from cards. By this time, AHSC had installed a mainframe computer system that kept track of orders and inventory, and the TekPro device was attached to this system rather than to a reproducing card punch. The TekPro unit also

allowed the hospital to enter some data, such as order quantities-by hand and it acknowledged that each line of data had been received correctly. The new order entry system, with mainframe computer support, was called Analytic Systems Automatic Purchasing (ASAP). (L0340562).

110. Both the Tel-American and ASAP systems were one-way linkages, from AHSC to the customer. Customers would have to use a telephone to find when and in what quantity the ordered items would be delivered. In 1977, AHSC developed ASAP which used a Ben 43 terminal as a standard input and output device to give AHSC the ability to respond to customer orders by verifying the item number and showing the availability and price of each item. "Items could be ordered using AHSC's catalog numbers or those of its competitors, and orders could be edited for accuracy and completeness before they were transmitted. For items that were not currently in stock, the system could often recommend a substitute but did not make any substitutions automatically." (L0340562).

111. In 1980 AHSC announced ASAP 3, which allowed customers to enter orders using the hospital's own internal stock numbers. (L0343532); (L0340562). ASAP 3 produced output to customer specifications as well, including inventory lists, purchase orders, and requisition forms. The customer could inquire on-line into pending back orders, prices, and delivery dates. Like its predecessors, ASAP 3 was intended to be used as part of an overall inventory management program, although it did actually manage the customer's inventory. An enhancement, ASAP 3 PLUS, incorporated bar code scanning of shelf labels, requisition forms, and a catalog to facilitate order entry. (L0340562).

112. ASAP 4, a computer-to-computer order-entry system, was released in 1983. It simplified the hospital's purchasing process by eliminating all the manual steps except actual approval. (L0340563).

113. In 1984, ASAP 5 went into pilot use and used an IBM personal computer as the customer's input and output device. AHSC also implemented VIP, which linked it to its suppliers so that it could transmit purchase orders electronically. (L0340563).

114. By 1985, Baxter Healthcare was offering computerized systems for ordering, tracking, and managing supplies, both internally and at customer sites, as part of its business of manufacturing and distributing more than 120,000 products for use in hospitals, laboratories, blood and dialysis centers, nursing homes, physicians' offices, and at home. (L0340559). "The Computer is at the heart of our success." said Karl D. Bays. Chairman and Chief Executive Officer of American Hospital Supply Corporation (AHSC) in early 1985, describing the importance of information systems to the company. (L0340561). Around this time AHSC merged with Baxter Healthcare. (L0340563-564).

115. By the late 1980s, customers were demanding a consolidated computerized order entry system that would allow the customer to order and purchase supplies from all vendors because using multiple systems, one for each vendor, "increased the amount of time it takes to place orders." (L0340559). The consultants noted significant customer interest in all-vendor systems, which were considerably more convenient than separate systems with individual formats, passwords, and reports. Hospitals incurred nearly \$2 in logistics costs for every \$1 they spent on supplies. About 5% of the logistics costs were due to ordering itself, and an all-vendor system might reduce this directly by only 10%, but there was also significant value in the consolidated data that could be produced by an all-vendor system. (L0340565).

116. These customer demands prompted the development of the next generation of e-procurement software called ASAP Express. In late 1987, Baxter and three hospitals of the Premier Hospitals Alliance began a pilot test of the ASAP Express computerized order entry system. The new system would allow orders to be placed with all participating vendors in a standard format, from the same terminal, and with a single telephone call. ASAP Express offered a "level playing field" that gave no advantage to any one vendor. (L0340559). Vendor-specific features, such as electronic catalogs, could be added to ASAP Express, and, as a result, vendors offering such features might achieve some advantage over their rivals. (L0340565). "Richard Egen believed that, for Baxter's hospital customers, the ultimate potential of ASAP

Express was “the total automation of hospital logistics, virtually eliminating the clerical aspects of purchasing.” (L0340565).

Lawson's Prior Art Software

117. “Founded in 1975, Minneapolis-based Lawson Software specializes in enterprise-wide accounting, human resources, distribution, and materials management application software for businesses worldwide. Lawson continually evaluates and implements the latest technologies to increase client's productivity.” (Inventory Control Procedures Manual (Release 6.0) (January 1, 1994) (© 1993) (L0012837-13145) at L0012849).

118. As of the late 1980s, Lawson was offering e-procurement/distribution software. Lawson's Versions 5.0 and 6.0 procurement software, which was available prior to August 10, 1994, included Order Entry, Requisition, Inventory Control, and Purchase Order modules. (L0012852). Although the discussion below cites to the Version 6.0 documentation, I understand that Version 5.0 worked generally as described below.

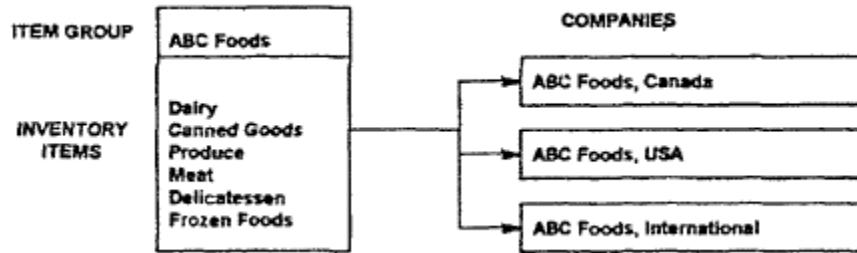
119. “The Lawson Requisitions system is a software package that is integrated with the Lawson Purchase Order and Inventory Control systems. Following are some of the major features and benefits of the Lawson Requisitions system.

- a. You can generate requisitions from the Lawson Inventory Control system. . . .
- b. You can request stock items, non-stock items, special items, and services on a single requisition. . . .
- c. You can quickly create purchase orders from requisitions using a one step process.
- d. You can split requisitions among multiple purchase orders. Buyer review is available before creation of a purchase order, which enables you to combine multiple requisitions for the same line item to one purchase order. (Requisitions Procedures Manual (Release 6.0) (January 1994) (© 1994) at Introduction, v) (L0009725-0009773) at L0009729).

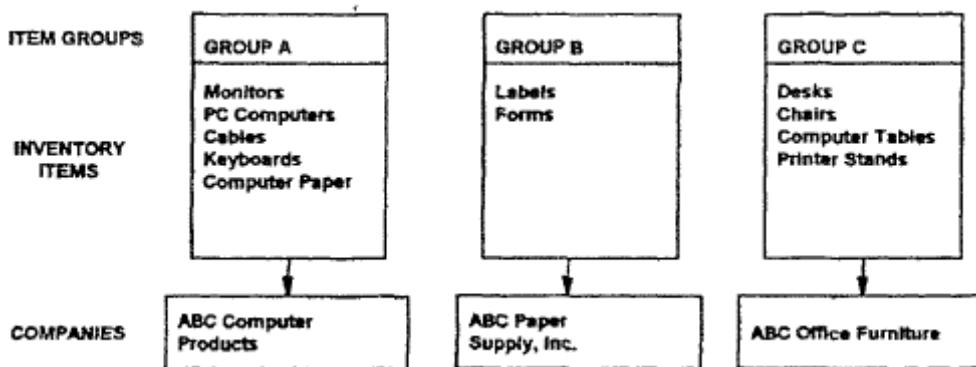
120. The Inventory Control system “maintains and controls inventory for up to 9,999 different companies. At a minimum the Inventory Control system provides the information necessary to support buying and selling operations. Controlling the inventory, knowing exactly what is in stock and where it is, is the first step. The second step is to manage the inventory by having the right amount of inventory available at the right time, reducing your inventory investment, while maintaining the desired customer service level. Lawson's Inventory Control System can have a significant impact on the success of your business.” (L0012843).

121. “The Lawson Purchase Order system is designed to assist Purchasing agents, Accounts Payable and Receiving clerks, and Accounting and Inventory Management personnel in buying inventory and internal supplies while minimizing inventory cost. You also have the ability to match vendor invoices to purchase orders. You can set up the system quickly and easily, especially if you use it with the Lawson Accounts Payable system. Once the invoice is approved and you release the invoice batch, the invoice becomes the responsibility of the Lawson Accounts Payable system.” (Purchase Order Procedures Manual (Release 6.0) (January 1994) (© 1994) (L0013146-0013295 at L0013151)).

122. “An item group is a method for sharing items between companies. If the same item numbers representing the same items are to be shared between many companies, those companies should be assigned to the same item group. If the same item number could represent different items for different companies, these companies should be set up in their own unique item groups.” (L0013134). “The Lawson Inventory Control system supports multiple inventory item groups and companies. Item Groups are used to identify inventory items for a company. For example, if a company distributes paper products, they would identify an item group for paper products. You can assign the same item group to multiple companies. In the diagrams shown below, ABC Foods set up one item group that is shared by three companies. Procedures described in this manual assume this setup.



123. If multiple companies exist but do not share the same inventory items, you need to set up unique item groups for each company as shown in the diagram below. (L0012875).



124. The Lawson Version 6 software included a database (“Item Master File”) that allowed customers to upload data regarding items that could be ordered using the Requisition and Purchase Order modules: “The item master file consists of item information that is not location specific such as the item description, generic name, freight class, sales class, inventory class, purchasing class, tax code, units of measure, etc. This *is* where you indicate if an item is tracked for inventory by lot and serial number. To define a non-inventory item, set the Inventory Tracking indicator to (N)o. Run rC211 (Item Master Listing) for a listing of established item master records.” (L0012922).

125. There were standard and custom fields for each item within the item master file: “Use ICI1.1 (Item Master) to add items to the item master file. All inventory items must be set up on this screen. This screen requires you to type the Item Group, Item identifier, first Description line and Stock UOM (unit of measure).” (L0012923). Custom fields could be added for items within the Item Master File: “You can use this screen as is or customize the field

names to meet your specific needs. For example, you can set up these fields to represent size, style, color, manufacturer name, version number, release date, etc.” (L0012931).

126. The following is a screen shot displaying an item (Item No. 1013, for cheddar cheese) for Item Group (ABC Foods) in the Item Master File. First they added the item, then edited the field defaults. They performed a (C)hange function to assign a generic name and establish inventory tracking. ABC Foods can inquire on items by generic name in IC30.1 (Item Search). Also, because the item is set up for inventory tracking, ABC Foods will need to set up an item location record for each location that stocks the item. (L0012924).

Item Master		
IC11.1 A Add Change Delete Inquire Next Previous		
Item Group	ABC ABC Foods	
Item	1013 CHEDDAR CHEESE	
Mimic Item		
Stock UOM	02 Date Added	
Generic Name	DAIRY UPC Code	
Replacement Item	MSDS Required . . . N No	
Decimals for Cost	3 Price	5 Quantity
Freight Class		Harmonize Code
Sales Class		Hazard Code
Inventory Class	DAIR	Purchase Taxable
Purchasing Class		Purchase Tax Code
Inventory Tracking	Y Yes	Tax Category
Serial Tracking	N No	Lot Tracking
Stock Weight	1.000	Stock Cubic
Status	A Active	Certification . . . N No
Add Complete - Continue		

127. The Lawson Version 6 software allowed customers (e.g. ABC Foods) to define classes for items within item master. “Classes further define items in the item master file for inquiry, processing, and reporting purposes. The set up procedure for each class type is exactly the same. Use all class types to access items in IC30.1 (Item Search). Use inventory classes to select items for reporting purposes and sales classes for pricing and sales analysis. Purchasing classes are used extensively in the Lawson Purchase Order system.” (L0012887). “Inventory Class: A user-defined subdivision of inventory by product grouping viewed from an inventory perspective. A major class and a minor class are available for further subdivision if desired. You can use inventory classes as a selection criteria in the item search inquiry program and in several

report programs including the movement analysis report.” (L0013133). For example, as shown in the screen shot below, ABC Foods could define a major inventory class for fruit and minor inventory classes to classify varieties of fruit (e.g., apples, pears, etc.). (L0012906).

IC86.1 A Inventory Class			
<input type="button" value="Add"/> <input type="button" value="Change"/> <input type="button" value="Delete"/> <input type="button" value="Inquire"/> <input type="button" value="Next"/> <input type="button" value="Previous"/>			
Item Group	ABC	ABC Foods	
Major Class	FRUT	Fruit	
Status	A	Active	
FC	Minor Class	Description	Status
-	APPL	Apple	A Active
-	ORAN	Oranges	A Active
-	BANA	Bananas	A Active
-	WGRP	White Grapes	A Active
-	RGRP	Red Grapes	A Active
-	KIWI	Kiwi	A Active
-	GPFR	Grape Fruit	A Active
-	WMEL	Watermelon	A Active
-	CANT	Cantaloupe	A Active
-	STFR	Star Fruit	A Active
-	PEAC	Peach	A Active

128. In addition to defining classes, the Lawson Version 6 software allowed customers to define generic names for items within the Item Master File ”to optionally group similar inventory items together under one name. Generic names appear on selected inventory reports and can be used to access specific items in IC30.1 (Item Search).” (L0012907). For example, as shown in the screen shot below, ABC Foods could set up Generic Names for each department in the store. This way they can access all items in a particular department at once. For example, they can access all bakery goods in IC30.1 (Item Search) using the generic name BAKERY. (L0012908).

Generic Names		
Item Group ABC ABC Foods		
Position To		
FC	Name	Status
-	PRODUCE	A Active
-	DAIRY	A Active
-	MEATS	A Active
-	DELT	A Active
-	PAPER	A Active
-	PET FOOD	A Active
-	FREEZER	A Active
-	HYGIENE	A Active
-	BAKERY	A Active
-	CAN GOODS	A Active
-	DRY GOODS	A Active
-	BEVERAGE	A Active
-	SNACKS	A Active

129. The Lawson Version 6 Item Master File could include both inventory items and nonstock items, but not special order items: “The system will keep track of the item by the quantity kept at various locations. Essentially, if the inventory tracking flag is set to an “N”, an item master record is maintained but no item location records are updated. These items are considered non-stock items.” (L0013134). “A nonstock item has a description, but quantities are not maintained. An item master record is kept, but not an item location record. This nonstock item is set up as Inventory Tracking = “N” on the item master file. A non stock item is differentiated from a special order item. A special order item has no item master or item location record and is used only by the Purchase Order and Order Entry systems.” (L0013135).

130. The Lawson Version 6 Item Master File was capable of including items from multiple different vendors:

- a. “You can use up to three different procedures to replenish inventory from a vendor.” (L0012968).
- b. “The system creates requisitions in the Lawson Requisition system and selects items to be reordered from vendors.” (L0012853).
- c. Mass Updating: “Quickly setup new locations, change the primary vendor for a product line and/or assign a new buyer to a product line.” (L0012854).

- d. Vendor Replenishment: Use this inventory replenishment level to create purchase orders for a specific vendor in the Lawson Purchase Order or Requisitions systems.” (L0012881).
- e. “After you establish an item location record in IC12.1 (Item Location), you are automatically transferred to IC12.2 (Reorder Information). Use this screen to set up purchasing and reorder information for an item. Purchasing information defines the item's primary vendor, the purchase from location, and the type of reorder document to create: (p)urchase order, (T)ransfer, (I)ssue, (R)equisition, (X)intransit or (N)one. Reorder information defines how and when inventory is replenished.” (L0012936).
- f. “You must define vendors in APIO.1 (Vendor) before you can process requisition purchase orders in RQ20 (Buyer Requisition Review and PO Create) or assign a suggested vendor in RQ 10.2 (Requisition Header). The suggested vendor is the vendor from which a buyer should consider ordering. You can change the suggested vendor when creating a purchase order. For information on defining vendors, see the *Accounts Payable Procedures Manual*. (Requisitions Procedures Manual (Release 6.0) (January 1994) (© 1994) at 2).
- g. Vendors are assigned vendor numbers. (L0012969).

131. The Lawson Version 6.0 software provided for identifying an item with both an item number from the Item Master File and the vendor number for the vendor that sourced the item: “Use PO13.1 (Vendor Item) to set up a cross-reference list of vendors for an item so you can look up the item if the vendor's item identification is different. This information is used to order an item from a specific vendor. When you order these items, the vendor information prints on the PO. That way, the vendor knows what item you are ordering based on their item number and description.” (L0013209).

132. The Lawson Version 6.0 software provided for cross-referencing an item number with a customer item number, which was a useful feature if customers asked for items using their own numbering system. (L0012606).

133. As shown above, the Lawson Version 6 software included the ability to search the Item Master File using a number of different queries. For example, searches could be done for items by generic name, by class types, by the first user-defined field (IC30.1 - Item Search). (L0012917, L0012931, and L0012924). Users could search for items by an item code. (L0013226). The item code is a “Key Field” (L0015722) that the system uses to access the data file information. (L0015617). Alternatively, Version 6.0 of the Lawson’s Purchase Order Module enabled a user to search for items by the item number in the Item Master or by the vendor item. (L0016265-67).

134. Version 6.0 of the Lawson's Requisition Module enabled users to create a requisition from a standard order. (L0009741). An order could be created from items retrieved from the database by item number. (L0013226, L0015719-22). Items in the Item Master File (inventory and non-stock items) could be added to requisitions: “The Lawson Requisitions system interfaces with the Lawson Inventory Control system for requisitioning stock and non-stock items. To set up the inventory structure. . . . 1. Use IC00 (Item Group) to define item groups. An item group identifies defaults and parameters for a specific group of inventory items defined in the item master file. 2. Use IC01 (Company) to define your company in the Lawson Inventory Control system. 3. Use IC02 (Location) to define inventory locations. You must define a delivering location in the Inventory system. You do not have to define a requesting location. 4. Use ICII (Item Master) to define non-stock items. Use IC11 and JC12 (Item Location) to define inventoried items.” (L0009734).

135. “**To print a catalog of items** Run RQ250 (Item Catalog) to print a list of the items and their descriptions for the selected item group and inventory class. This program lists only inventoried and non-stock items defined in IC11 (Item Master).” (L0009753).

136. “How you create a requisition depends on the type of items you request and from where you request them. You can request four types of items: inventoried, non-stock, special orders, and services. . . . **Tips** While creating a requisition, you can select an item and display its stock-on-hand balances and other inventory information.” (L0009740)

137. “How requisitions are processed depends on the line item type and from where you request items, either from inventory stock or directly from a vendor. **Non-stock, special order, and service items.** When requesting non-stock, special order, or service items, the system sets the Create PO field to Yes in RQIO.3 (Requisition Line Detail). The buyer reviews the requested items, assigns vendors, and creates purchase orders. After receiving items, close the requisition lines and, if desired, print delivery tickets. **Inventoried items.** When creating requisitions for inventory items, you can request items from inventory stock or directly from a vendor. When requesting items from a vendor, the Create PO field in RQ 1.0.3 must be Yes.” (L0009735).

138. Version 6.0 of the Lawson's Requisition Module enabled users to create purchase orders from one or more requisitions. (L0009747-49). “To create a purchase order from a requisition for inventoried items, the Create PO field in RQ 1.0.3 (Requisition Line Detail) must be Yes. The system sets this field for non-stock, special order, and service items. There are two ways to create purchase orders from requisitions:

- a. Create a purchase order directly from one requisition. See “Creating a Purchase Order from One Requisition.”
- b. Select items from several requisitions to create a purchase order. See “Selecting Items to Create a Purchase Order.” (L0009747).

139. Purchase orders could be issued to multiple vendors: (L0013161)

Extensive line item information	includes this information for line items: <ul style="list-style-type: none"> • item number • vendor item number • item description • valid units of measure • weight • volume • comments • delivery date range • unit cost defaults or manual pricing • ship-to locations by line item • certification/inspection required flags 	Defaults general ledger distributions for inventoried items and allows entry for non-inventoried items.
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(L0013162).

140. “(Use PO10.1 (Vendor), P013.! (Vendor Item), and P014.1 (Vendor Item Quote) to setup vendors and vendor items for the Purchase Order company. Use PO10.1 (Vendor) to set up the vendors and purchase from locations for vendors. Use PO13.1 and PO14.1 to set up vendor items and quotes for vendor item. The vendors you set up in these screens must already exist as vendors in the Accounts Payable system.” (L0013204).

141. The Lawson Version 6.0 software tracked inventory of items in the Item Master File:

Inventory Control Features

Listed below are the Lawson Inventory Control system major features, their advantages, and benefits.

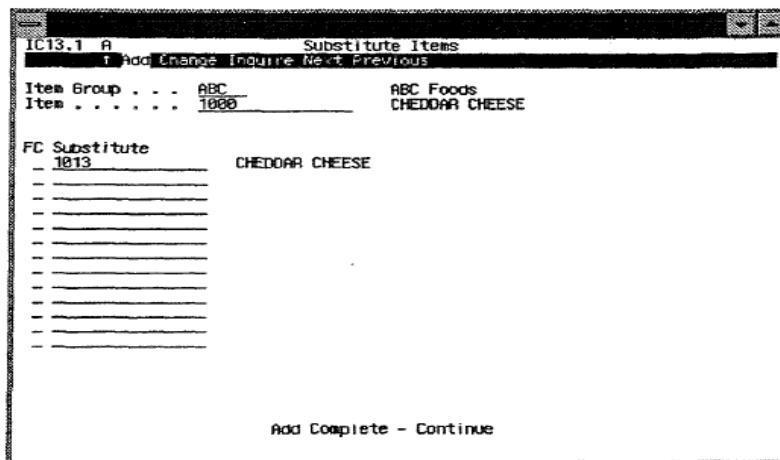
Feature	Advantage	Benefit
User Definable Maintenance Screen Formats	The system allows you to create maintenance and inquiry screen formats to meet your specific needs.	Customize your own item set up process to streamline the process of adding and maintaining inventory items.

Multiple Levels of Stock-On-Hand (SOH) Balance Control	The system tracks SOH balances by location, bin, lot, serial number and unit of measure. Item availability is based on supply, demand, and SOH quantities.	Quickly access stock detail information such as: item bins, SOH quantities, lot/sublots, lot holds, inspection/allocated totals and freeze status.
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L0012852).

142. The Lawson Version 6.0 software tracked inventory in multiple locations: “Locations define places within a company where you store inventory. They can represent physical places such as cities, buildings, warehouses or they can represent logical classifications such as administration, supplies, finished goods, etc.” (L0012876).

143. The Lawson Version 6.0 software “uses item substitutes when an item does not have sufficient stock to fill an order. When this is the case, the system first looks for a replacement item in the item master file. If one is not set up or does not have sufficient stock, the order entry system looks for substitute items. If any substitute items exist, this screen displays during the ordering process, allowing the user to select a substitute item to fill the order.” (L0012941). Unlike replacement items, selecting a substitute item was not automatic. (L0012658). The Item Master File for each item included a field allowing the customer to set up to two substitute items. For example, as shown in the screen shot below of the Item Master File for item 1000, ABC Foods selected a different brand for same product (item 1013, cheddar cheese):



(L0012943).

144. A “Replacement Item” is an alternative item to use in place of another inventory item if the inventory item is out of stock. Like the substitute item, it is a field in the Item Master File. The Lawson 6.0 system automatically “uses the replacement item when the normal item is out of stock.” (L0013137; L0012658). The system would then display a message indicating that the replacement item was used in place of the original item. (L0012658).

Catalog Databases and Search Engines

145. The prior art of catalog databases and database search engines is long and extensive. As of the early 1990s, there were more than six different systems that would allow multiple catalogs to be loaded into a database with searching capabilities for such catalogs. (G000362-375 at G000365-369).

146. The following systems had similar functionality to TV/2, which was used in the preferred embodiment of the patents-in-suit as described above.

147. DynaText provided the same functions as TV/2, except that it would run only in a Windows or UNIX environment. DynaText had very strong searching capabilities, including Boolean, wildcard, proximity, and dynamic searching. (G000366). DynaText could display text, graphics, and videos. (G000365). DynaText included a table of contents, links to documents, and the ability to interface with other applications, like requisition/purchasing systems. (G000365-366).

148. Guide was also a strong competitor to TV/2. It allowed for text searching in a document or group of documents. The search could be run against the whole document or an index of target words for the document. Although Guide was capable of linking to other applications, like RIMS, it was more difficult to transfer information to and from other applications than TV/2. (G000367). Guide could display text, graphics, and videos. (G000365).

149. InnerView provided a database search engine that ran on Windows and allowed several searching options, including Boolean, text, wildcard, and phrase searching. It provided the ability to search only certain fields of a database (as opposed the entire database). It also had

the ability to connect to other applications and exchange data with them. (G000368). InnerView could display text, graphics, and videos. (G000365).

150. Prism was designed to manage all forms of product sales and marketing information. It incorporated any combination of text, graphics, audio, animation, and full motion video into a product information system. (G000369). It could display text, graphics, and videos and was capable of linking to other applications. (G000365).

151. The above recitation of the state of the art as it existed before 1994 demonstrates a history of incrementally advancing procurement and requisition software products in response to increasing customer demands and as new, cheaper functionality became available on or for use with computers, such as increased storage capacity, increased speed, and more user-friendly interfaces.

The RIMS System

152. The '989 Patent as well as a marketing brochure entitled *Fisher RIMS: A Revolutionary Electronic Requisition and Inventory Management System* ("RIMS Brochure"), (L0260595-L260606) describe the Fisher RIMS system, which is a requisition and inventory management system.

153. The patents-in-suit incorporate by reference the disclosure of the '989 patent into their specifications and provide the structure for the requisitioning and purchase order generation for the asserted claims. However, it is my opinion that the Patent Office examiner did not understand that the RIMS system was prior art to the patents-in-suit. The Applicants did not disclose to the Patent Office that the RIMS system was on-sale and in public use more than a year before the filing date of the '683 patent. The Applicants did not disclose the RIMS brochure to the Patent Office. The Applicants did not notify the Patent Office that the '989 Patent had different inventors than the patents-in-suit and the '989 Patent did not become prior art under 35 U.S.C. §102(e) until it issued in January, 1998 (almost four years after the '683 patent was filed). Additionally, the Applicants did not disclose the '989 patent as "prior art" in

an information disclosure statement and it is not listed as a “reference cited” on the face of any of the patents-in-suit. The fact that Patent Office has recently rejected claims of the patents-in-suit based on the ’989 patent or found that the ’989 raises a substantial question of patentability as to other asserted claims during the currently pending reexaminations supports my opinion that this prior art was not considered during the original prosecution.

154. RIMS employs a host computer 10 and a local computer 20 that are linked to permit two-way data communications in a real time environment. By accessing their respective databases, each computer can build and transmit to the other computer data relating to a particular requisition of an item in Just-in-Time (JIT) inventory. The other computer can then use the received data to continue processing of the requisition or to update its JIT inventory records. (’989 patent, Abstract).

155. The Fisher RIMS system provides requisitioning and inventory management for five types of products:

Product Type	Description
01	Distributor-owned item in JIT warehouse located at or new customer (’989, 5:20-27)
03	Items regularly sold by distributor, which may be stored at distributor’s warehouse or may be ordered from vendors for direct shipment to customer (’989, 5:27-37)
04	Third-party item that distributor does not regularly purchase for resale from a vendor, which may be stored at distributor’s warehouse, but often are ordered from vendors for direct shipment to customer (’989, 5:37-45)
05	Third-party item that distributor does not stock or purchase for customer, but which the customer purchases from an outside vendor (’989, 5:45-50)
06	Customer-owned item maintained as customer-owned inventory in the JIT warehouse located at or new customer (’989, 5:50-56)

156. The RIMS system contains a database 20 on host computer 10 (which is actually several databases) storing information about items from multiple sources (e.g., third party vendors and distributors) (’989 patent, 3:10-16):

- a. “Inventory portions of database 20 includes data describing the items and quantities thereof available at a particular Distributor warehouse 30 and at other Distributor warehouses.” (’989 patent, 3:18-21).
- b. “Other portions of database 20 include item records for each Product regularly sold by the Distributor. Each item record preferably includes information such as Distributor’s catalog or part number for the Product, Distributor’s list price, Distributor’s current cost, Distributor’s Insupplier (vendor) for the Product and a code identifying the Product as part of a product grouping to be treated similarly for customer discounting purposes.” (’989 patent, 3:21-28)
- c. “Database 20 may also include file records for items which Distributor does not routinely supply to all customers, but has agreed to purchase for supply to particular customers on a special or third party procurement basis. Such file records do not contain a Distributor list price, a discount code or a Distributor catalog number or part number, but will contain other information as described above for regular item records including a vendor, a vendor part or catalog number and a vendor list price.” (’989 patent, 3:46-55).
- d. “Host database 20 also includes data regarding Distributor’s cost prices and vendors for items from third-party suppliers 37 and 38 which are regularly distributed by Distributor to its customers.” (’989 patent, 3-62-65).
- e. “database 20 may contain cross-references from Distributor’s catalog number to its vendor’s part number and to similar catalog numbers of other suppliers or distributors for the same Product, either as a part of the item record, in a separate cross-reference file or both.” (’989 patent, 3:32-37).

157. Database 50 on local computer 40 has similar and overlapping data content to database 20. (Database 50 on local computer 40 has similar and overlapping data content to database 20. (’989 patent, 5:7-20). For example, “most records in local database 50 identify products by a stock number or part number compatible with the Customer’s record-keeping

system. Part Master records (see Table VI) also contain a manufacturer or supplier's catalog or part number, which will be the number used on purchase orders and, for product types 01 and 03, will be the Distributor's catalog or part number. The local database 50 contains a cross-reference file between such stock numbers and a particular supplier's catalog or part number. The creation of this cross-reference file by the CSR is described below." ('989 patent, 8:29-37). The database 50 also includes a vendor database containing data relating to all valid vendors for type 04 products. ('989 patent, 15:20-27).

158. When a customer's employee wants to order an item, he or she sends a request to distributor's customer service representative ("CSR"), who uses the RIMS system to create a requisition. The first step is for the CSR to enter the customer's account number and a requisition number into an order header data screen, which causes the correct name and address associated with the account number to be entered in the appropriate fields of the data screen. ('989 patent, 6:39-64).

159. If the CSR hits the F2 button, the program jumps to a requisition management data screen (e.g. a search screen) and search criteria, e.g. stock number, may be entered: "The Account Number and Requisition Number are automatically passed to Requisition Management data screen 68 The CSR can now enter the items and quantities for the requisition. The item is identified by entering the Distributor catalog number of the desired item in the field below the STOCK NBR label on the appropriate line number in Requisition Management data screen 68. . . . The CSR may also enter an item by using a catalog or reference number from a third-party supplier other than the Distributor where the same item has both Distributor and third-party catalog numbers (which are necessarily different). . . . When the CSR enters an item code in the STOCK NBR field and hits the ENTER key, local computer 40 begins a program described in the flowchart is shown in FIG. 3. . . In step 201, the entered stock number is added to the appropriate field of the Requisition Item Table in local database 50 along with the associated line number. **In step 202, local computer 40 searches the Part Master Table in local database 50 for the STOCK NBR that has just been entered (which can be either the Customer's stock**

number or a valid cross-reference number such as a Distributor catalog number.)” ('989 patent, 8:13-51 (emphasis added)).

160. If the search finds the entered stock number in local database 50, the following information is added to the requisition item table: “the quantity of the item available in the Customer-owned inventory 54 in the JIT facility 51 (for product type 06) or in the Distributor-owned inventory 52 in the JIT facility 51 (for product type 01).” ('989 patent, 8-62-9:8). The data screen 68 is likewise updated with: “the default unit of measure (in the UM field); the product type (in the PT field); the cross-reference number, if any (in the XREF field); the list price of the item, if the product type is 06 (in the UNIT PRICE field); a text description of the item (in the DESC field); the quantity of the item available in the JIT facility 51 as Customer-owned inventory 54, product type 06, or as Distributor-owned inventory 52, product type 01 (in the QTY AVAIL field); a description of the location of the item in the relevant stockroom or warehouse (in the LOC field); and a code identifying the relevant warehouse (in the WHSE field).” ('989 patent, 9:35-44).

161. If the search does not find the entered stock number, the product type is defaulted to type 03 (distributor catalog item). At this time, if the CSR knows this is not a routine item that the distributor regularly carries, he or she may change the type to 04 (3rd party item distributor orders) or 05 (3rd party item customer orders). ('989 patent, 9:49-53).

162. “The CSR can then enter the quantity of the item being requisitioned in the field below the QTY label in Requisition Management data screen 68. The entered quantity will be displayed on data screen 68 and this data will be entered into the appropriate field of the Requisition Item Table in local database 50.” ('989 patent, 10:3-8). That is, the requisition (i.e. Requisition Item Table) will include those items from the search results that are selected by CSR when he or she entered a non-zero quantity in the data screen 68. The CSR may add as many items as he or she wants by using as many lines of the data screen 68 as are necessary to complete the requisition. ('989 patent, 10:22-26).

163. In addition to foregoing searches, the '989 patent discloses separately searching selected portions of database 20 and/or database 50:

- a. "In the validation step, host computer 10 checks the customer account number, item stock number (using the product type information to determine what database in host databases 20 to search) and the price against the relevant information in host database 20 to validate the data in the received purchase order data block." ('989 patent, 18:63-19:1).
- b. "If the product type of the line of the requisition being processed is 04, control passes through decision block 301 to decision block 316. In block 316, host computer 10 determines if the received vendor number (VENDOR NBR) for the line of requisition data block being processed is a valid vendor from which Distributor will order items for shipment to the Customer. Host computer 10 performs this action by comparing the vendor number to a database containing all valid vendor numbers which is stored in host database 20. If the vendor number is not valid, host computer 10 creates a data block with an unauthorized vendor error code in step 318. This data block is transmitted to local computer 40 in step 312." ('989 patent, 15:14-26).
- c. Searches may also be limited by Distributor warehouse. ('989 patent, 22:36-47).

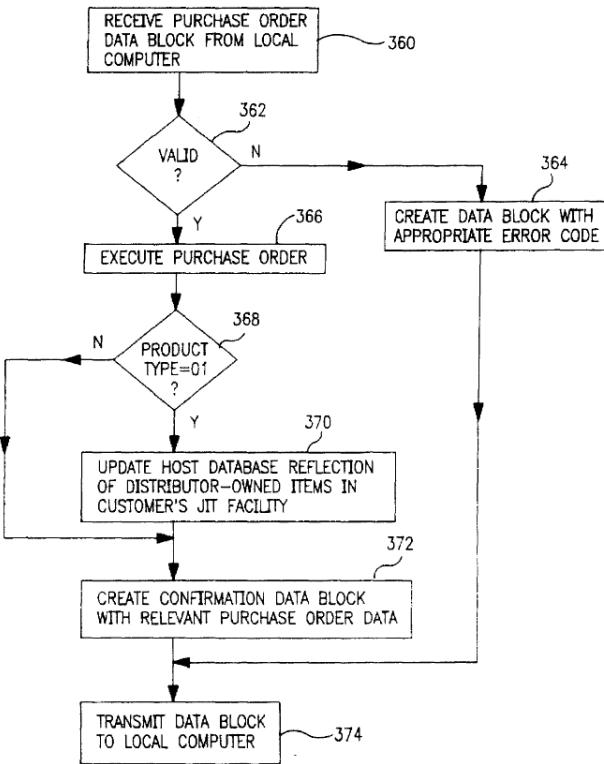
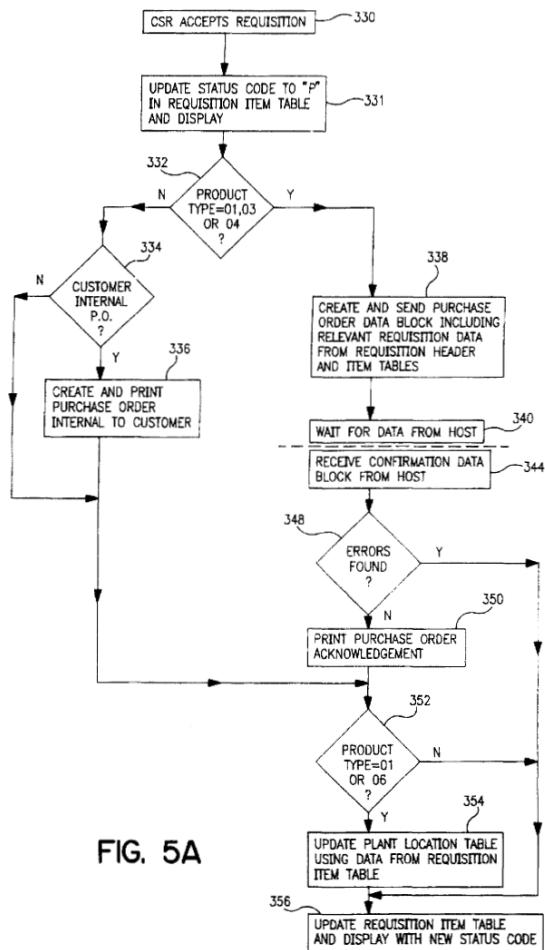
164. "After all of the items for a requisition have been entered, the next step is that of sourcing the requisition. Sourcing the requisition is the process of determining what inventory will be used to fill the requisition." ('989 patent, 11:26-29).

165. A requisition may require sourcing from different distributors and third parties: "Any particular requisition may involve all of these product types, only a single product type, or any combination of product types. The product type which was determined when the STOCK NBR was entered on the Requisition Management data screen is now used to source the item. Items of product type 06 are sourced from the Customer-owned Inventory 54; items of product type 01 are sourced from Distributor owned inventory 52." ('989 patent, 11:48-53). "FIGS. 4A

through 4D are flowcharts describing programs employed by an embodiment of the system of the present invention to source requisitioned JIT inventory owned by either the distributor or the customer, other inventory owned by the Distributor, and inventory owned by other vendors.” (’989 patent, 2:46-51). The ’989 Patent describes rules for sourcing: “If no code is entered, the general sourcing rules of the Distributor (which may employ searching several warehouses in a predetermined order) will be used. The specific algorithms employed in connection with these STOCK POLICY codes are well known to those of ordinary skill in the art and thus are not described in detail here.” (’989 patent, 22:48-53).

166. When the CSR accepts the requisition, control passes to the purchase order build program as shown in Figs. 5A and 5B below. (’989, 17:35-37). Figs. 5A and 5B describe the acceptance of a single line item for sake of clarity. (’989, 17:63-65). “In the preferred embodiment of the present invention. a typical requisition will often have several line items. In that event, the entire requisition is processed line by line by the respective computers before transmitting data to the other computer. Similarly, only one purchase order is generated for the requisition.” (’989 patent, 17:65-18:3).

167. Although the preferred embodiment contemplates one purchase order, the ’989 patent discloses generating at least two purchase orders for a single requisition as shown in Fig. 5A (boxes 336 and 338).



168. “As described in the diagram FIGS. 5A and 5B, for items of product types 01, 03 and 04, local computer 40 uses Purchase Order Build Program 112 to create a purchase order between the Customer and the Distributor from the data in the Requisition Header and Item Tables. For items of product type 06, a Purchase Order record internal to the Customer may be created at this stage, recording a sale from the Customer's purchasing department to the requisitioning department or account, for later use by the Customer's host computer in making accounting adjustments.” ('989 patent, 17:37-49).

169. Finally, the '989 patent discloses cross-referencing various “equivalent” items within the databases: “The Distributor, other distributors, and the Customer will frequently use different identifying part numbers for items which are essentially equivalent, e.g., a 250 ml PYREX Griffin beaker manufactured by Corning (who designates it as part number 1000 250)

could have a Distributor's catalog number 02 540K and competitor's part numbers B2650250, 13912207, and 029827. Distributor and competitors may also have similar products from other vendors (e.g., a 250 ml KIMAX Griffin beaker from Kimble). To address this situation, the preferred embodiment of the system of the present invention includes a Host CrossReference Table in host database 20 as well as a Local Cross-Reference Table in local database 50. The Host Cross-Reference Table includes, for each item regularly stocked or supplied by the Distributor (i.e. ... items of product type 01 or 03) a list of the corresponding part numbers of Distributor's vendor and other distributors (which are identified by a competitor number) for items which have been determined to be equivalent." ('989 patent, 32:1-20).

170. The RIMS system uses the cross-reference table to "convert" Customer stock numbers to Distributor catalog numbers and to convert Customer stock numbers to catalog numbers of other vendors or sources that are recognized by the host computer. ('989 patent, 33:9-14; 34:63-67).

171. As shown above, Johnson '989 clearly discloses a cross-reference table, "converting" stock numbers to distributor catalog numbers, and using the cross-reference table to substitute an item from one source to an item from a different source. In fact, Johnson '989 provides significantly more detail regarding these claim elements than the disclosure of the patents-in-suit. Yet the Patent Office said several times during the prosecution history that the prior art did not teach the converting steps. This is additional proof that the Patent Office did not understand that Johnson '989 was prior art during the examination of the patents-in-suit.

172. In the '516 Reexam Order, the Patent Office found: "In the present instance, there exists a SNQ based solely on the Johnson '989 Patent, which as noted above was cited in the specification of the '516 Patent, but was not discussed by the examiner in any Office action, nor utilized in any discussion with respect to the claims. With this, the reference of the Johnson '989 Patent does not appear to have been considered by the examiner in the original prosecution. Further, as noted above, since the Johnson '989 Patent and the '516 Patent have different inventive entities, the reference of the Johnson '989 Patent is being viewed in a new light, as

presented by the Third Party in the Request for Reexamination, in that the Johnson '989 Patent is seen to teach the claimed features of the '516 Patent. When viewing the Johnson '989 Patent in this new light, there is a substantial likelihood that a reasonable examiner would consider this teaching important in deciding whether or not the claims are patentable. Accordingly, the Johnson '989 Patent raises a substantial new question of patentability as to claims 1-29, which question has not been specifically decided in a previous examination of the '516 Patent. ('516 Reexam Order at 8-12). This is consistent with my analysis, and further confirms that the PTO did not understand that the '989 disclosure should be considered as prior art when it first allowed the Patents to issue.

TV/2 System

173. Technical Viewer 2 search program ("TV/2"), available from IBM, is a search program 50 that is capable of searching through large volumes of information quickly and accurately. ('683, 4:1-9). TV/2 was the catalog database and search program that the inventors used as the preferred embodiment of the patents-in-suit. ('516 Patent, 4:6-12). Furthermore, TV/2 forms part of the exemplary structure corresponding to several means-plus-function elements in the Court's claim constructions.

174. "Technical Viewer/2 is an electronic documentation program that any organization can use to produce and display large amounts of information. In particular, information providers such as manufacturers can use the program to make parts catalogs and service manuals available to users for example their sales and service agents in an electronic online format." (L0132126).

175. TV/2 was used to display both text and images and had special display capabilities tailored for parts catalogs: "Text Presentation. The ability to display text in multiple fonts, sizes, and colours. Image Handling. Display of photographs and diagrams. . . . Parts Catalog. Special parts catalog functions that enable parts to be identified and selected. Applications can be written which, in conjunction with Technical Viewer/2, allow users to select parts by picking

callout numbers on a diagram, or by selecting parts from lists. Hypertext links can be made to and from parts assemblies.” (ePLUS0210936).

176. In addition to electronically displaying documents, such as catalogs, TV/2 included a rich set of search capabilities that allowed users to quickly find what they were looking for in a large volume of technical documents: “Technical Viewer/2 allows a user to read a document that is stored on the workstation. Once the document has been opened, hypertext and hypergraphic links enable the user to find topics from a table of contents, and move rapidly from the current topic to related topics. (A topic can be thought of as an ‘electronic page’ or part of such a page.) . . . A search facility that can locate every occurrence of word or phrase in either the current topic list of selected topics, the complete document or another document. A global character can be used to search for partial string.” (L0132128).

177. TV/2 allowed users to search catalogs for product part numbers: “simply call for the information by specifying key words such as product part numbers or names instructing the computer by selecting an icon on the screen or using the keyboard.” (L0132133).

178. TV/2 was designed to store multiple technical documents, such as parts catalogs, on CD-ROM or other database storage device so that they could all be searched at one time:

- a. “Large capacity means all technical publications can often be held on a single CD-ROM.” (L0132134).
- b. TV/2 “can search in seconds through documents on CD-ROM . . .” (L0132133).

179. TV/2 was designed to be linked to a parts ordering/requisition system:

- a. TV/2 runs on OS/2 which makes it easier to integrate with other OS/2 applications. (ePLUS0509242). RIMS also operated on OS/2. (‘989, 4:15-20). This made the TV/2 system a logical choice to combine with RIMS.
- b. “Some of the possibilities” for TV/2 included: “Integrating parts catalogues with dealers’ computer systems such as order entry, inventory management, and customer records.” (L0132134). One of ordinary skill reading this material at the time it became available would have concluded that the RIMS system was an

obvious choice to integrate with the TV/2 system, since RIMS was a type of order entry, inventory management, and customer record system.

- c. “You can also create a ‘shopping list’ just by selecting items and passing that list to another application. For example, you might select parts to be ordered from the exploded drawing in a parts catalogue. The parts list could then be sent directly to your parts ordering system.” (L0132133). Again, because the RIMS system was a parts ordering system, one of ordinary skill reading this material would conclude that the TV/2 system was designed to interface with systems just like the RIMS system.

P.O. Writer Plus V.10

180. During reexamination of all three patents-in-suit, the Patent Office found that the P.O. Writer Manual qualifies as prior art. (*See, e.g.*, Final Rejection in the '683 Patent Reexamination at 4-8; '516 Reexam Order at 14-15; Non-Final Rejection in the '172 Patent Reexamination at 6-7).

181. The P.O. Writer Plus system was an electronic sourcing system that included an electronic database that retained and retrieved product information from multiple vendors, including information such as an item number, item description, inventory location, price, commodity code, unit of measure, and vendor identification. (The P.O. Writer Manual, Guided Tour at 22 & 130-31; Final Rejection in the '683 Patent Reexamination at 21 & 60; Non-Final Rejection in the '172 Patent Reexamination at 18-19). Product information could be maintained within the P.O. Writer Plus system as product catalogs organized in various ways, including by vendor or by product type.

182. The P.O. Writer Plus system allowed a user to select product catalogs to search, resulting in a search of less than the entire data set in the database. The system allowed a user to search for matching items among selected product catalogs by specifying various search criteria including item number, commodity code, and keyword associated to the item description. (The

P.O. Writer Manual, Guided Tour at 46-47; Final Rejection in the '683 Patent Reexamination at 21 & 60; Non-Final Rejection in the '172 Patent Reexamination at 19).

183. After a desired item was selected from the results of a database search, the P.O. Writer Plus system was capable of transferring the relevant product information for the selected item from the database onto an electronic requisition. (The P.O. Writer Manual, Guided Tour at 47-49 & 117-47; Final Rejection in the '683 Patent Reexamination at 21 & 60; Non-Final Rejection in the '172 Patent Reexamination at 19). For a selected item in the requisition, the P.O. Writer Plus system was capable of: (1) determining the availability of the item in the inventory of the customer; (2) utilizing EDI transactions or issuing RFQs to multiple vendors to ascertain, record, and retrieve the availability of the selected item from a prospective vendor; (3) determining the price of an item; (4) cross-referencing or converting data relating to the selected item to a generally equivalent item from a different source; and (5) generating multiple purchase orders from a single requisition. (The P.O. Writer Manual, Guided Tour at 49 & 149-53; Final Rejection in the '683 Patent Reexamination at 22-23, 60-61, 70, 102; Non-Final Rejection in the '172 Patent Reexamination at 19-21).

184. The P.O. Writer Manual was not cited by the Applicant or considered by the Examiner during prosecution of the patents-in-suit.

185. In the '516 Reexam Order, the Patent Office found: "it is agreed that the consideration of the P.O. Writer raises a substantial new question with respect to claims 1-29 of the '516 Patent. With respect to independent claim 16 of the '516 Patent, the P.O. Writer reference is seen to teach of a converting means for converting data relating to an item from a first catalog to data relating to an item from a second catalog [see the P.O. Writer Plus, Requisition Interface, Exhibit 15, pages 11 through 15, particularly on page 11, which states 'When Requisitions come into Purchasing, they must first be split up by a buyer or by vendor. ... Some requisitions will need to be split because there are multiple items that are purchased from different vendors. The P.O. Writer Plus Requisitioning Interface does all of this automatically!... Assignment of vendors and buyers is based on the last purchase of a given item.']. With this

section, the P.O Writer reference can be interpreted as converting data relating to an item from a first catalog to data relating to an item from a second catalog, as required in independent claim 16. As noted above, this feature was the only mentioned in the original prosecution to be that of allowable subject matter for each of the claims in the original prosecution. Therefore, the P.O. Writer is seen to raise a substantial new question of patentability that was not present in the prosecution of the application which became the' 516 Patent. Further, there is a substantial likelihood that a reasonable examiner would consider this teaching important in deciding whether or not the claims are patentable. Accordingly, the P.O. Writer raises a substantial new question of patentability as to claims 1-29, which question has not been decided in a previous examination of the '516 Patent." ('516 Reexam Order at 14-15).

The SABRE System

186. During reexamination of the patents-in-suit, the Patent Office found that the Practical Guide to SABRE qualifies as prior art. (*See, e.g.*, Final Rejection in the '683 Patent Reexamination at 4-8; '516 Reexam Order at 15-16; Non-Final Rejection in the '172 Patent Reexamination at 5).

187. American Airlines' SABRE system maintained a massive collection of catalogs of travel offerings in the SABRE system information database, portions of which could be selected and searched to locate, for example, a particular desired flight or flights using multiple search criteria. (The Practical Guide to SABRE at 2, 51 & 377; Final Rejection in the '683 Patent Reexamination at 16 & 47; Non-Final Rejection in the '172 Patent Reexamination at 14). Upon selection of a desired flight from the results of a database search, the SABRE system could transfer the relevant flight segment information to an electronic itinerary (called a "Passenger Name Record" or "PNR" in the SABRE literature). (The Practical Guide to SABRE at 7, 9-11 & 15-16; Final Rejection in the '683 Patent Reexamination at 17 & 47; Non-Final Rejection in the '172 Patent Reexamination at 14).

188. For a selected flight segment on the itinerary, the SABRE system could: (1) determine the seat availability in airlines' inventory; (2) determine the price of the airline seat on

the itinerary; (3) perform cross-referencing or converting of a flight segment on the itinerary to determine an alternative airline offering a comparable flight segment; and (4) generate multiple purchase orders from a single itinerary if an itinerary included flights on different airlines or included hotel, car, or cruise reservations. (The Practical Guide to SABRE at 2, 64, & 279; Final Rejection in the '683 Patent Reexamination at 18-19 & 49; Non-Final Rejection in the '172 Patent Reexamination at 15-17).

189. The Practical Guide to SABRE was not cited by the Applicant or considered by the Examiner during prosecution of the patents-in-suit.

190. In the '516 Reexam Order, the Patent Office found: "the Practical Guide to SABRE raises a substantial new question with respect to claims 1-29 of the '516 Patent. With respect to independent claim 16 of the '516 Patent, the Practical Guide to SABRE reference is seen to teach of a converting means for converting data relating to an item from a first catalog to data relating to an item from a second catalog [see the page 64, wherein the SABRE system can display alternative flights from different carrier's catalogs for the particular travel date. With this section, the Practical Guide to SABRE reference can be interpreted as converting data relating to an item from a first catalog to data relating to an item from a second catalog, as required in claim 16. As noted above, this feature was the only mentioned in the original prosecution to be that of allowable subject matter for each of the claims of the '516 Patent. Therefore, the Practical Guide to SABRE reference is seen to raise a substantial new question of patentability that was not present in the prosecution of the application which became the '516 Patent. Further, there is a substantial likelihood that a reasonable examiner would consider this teaching important in deciding whether or not the claims are patentable. Accordingly, the Practical Guide to SABRE reference raises a substantial new question of patentability as to claims 1-29, which question has not been decided in a previous examination of the '516 Patent." ('516 Reexam Order at 15-16).

The Gateway 2000/MRO Version

191. During reexamination of the '172 and '683 patents, the Patent Office found that the Gateway Manual qualifies as prior art. (*See, e.g.*, Final Rejection in the '683 Patent Reexamination at 4-8; Non-Final Rejection in the '172 Patent Reexamination at 6-7).

192. As taught by the Gateway Manual, the Gateway 2000/MRO system was a complete electronic sourcing system with a rich set of catalog, purchasing, and inventory management capabilities. (The Gateway Manual at 4-18, 4-19 & 15-42; Final Rejection in the '683 Patent Reexamination at 26 & 73; Non-Final Rejection in the '172 Patent Reexamination at 26). It included a purchasing module, requisitioning module, and an inventory control module, among others, and maintained a database of third-party product information such as product number, product description, vendor identification code, vendor catalog number, price, commodity code, unit of measure, and inventory status.

193. The product information database was searchable using multiple search criteria. (The Gateway Manual at 4-7 – 4-19; Final Rejection in the '683 Patent Reexamination at 26-12 & 73; Non-Final Rejection in the '172 Patent Reexamination at 27). The Gateway 2000/MRO system included a separate table in the product information database for electronic product catalogs that the user wished to maintain. The user could search for and select desired items from electronic catalogs for inclusion on requisitions. The Gateway 2000/MRO system generated requisitions, checked inventory status and pricing for items, converted to alternate sources for items, and generated multiple purchase orders from requisitions. (The Gateway Manual at 4-3, 4-5, 4-15, 4-17, 4-20, 4-22, 4-26, 4-27, 4-33 6-3, 6-16 & 6-35; Final Rejection in the '683 Patent Reexamination at 27-28 & 75-76; Non-Final Rejection in the '172 Patent Reexamination at 27-28 & 30.)

194. The Gateway Manual was not cited by the Applicant or considered by the Examiner during prosecution of the patents-in-suit.

The J-CON system

195. During reexamination of all three patents-in-suit, the Patent Office found that the J-CON Manual qualifies as prior art. (*See, e.g.*, Final Rejection in the '683 Patent Reexamination at 4-8; '516 Reexam Order at 14-15; Non-Final Rejection in the '172 Patent Reexamination at 7).

196. The J-CON Manual describes an electronic-sourcing system, the J-CON ("Jobber-Connection") system, that was designed for use in the operation and management of automotive parts stores (automotive parts stores were called "Jobbers" in the J-CON literature). The J-CON system maintained a library of automotive parts catalogs from many sources in an electronic database, portions of which could be selected and searched for a desired automotive part. (The J-CON Manual at Ch. 3, Sec. 2, Pages 1 & 11 & Ch. 5, Sec. 3, Page 1; Final Rejection in the '683 Patent Reexamination at 10 & 33; Non-Final rejection in the '172 Patent Reexamination at 22).

197. Upon selection of desired parts from database search results, the J-CON system could transfer the relevant automotive parts information for the selected parts from the database onto an electronic requisition (called a "ticket" in the J-CON literature). (The J-CON Manual at Ch. 3, Sec. 2, Pages 1, 4 & 8-9; Final Rejection in the '683 Patent Reexamination at 11-12 & 34; Non-Final rejection in the '172 Patent Reexamination at 23). For a selected item on the requisition, the J-CON system could electronically determine the current availability in the inventory of the automotive parts store, any sister stores associated with the automotive parts store, and/or independent distributors to the automotive parts store. (The J-CON Manual at Ch. 2, Sec. 10, Page 15 & Ch. 3, Sec. 2, Pages 6 & 10; Final Rejection in the '683 Patent Reexamination at 13 & 34; Non-Final rejection in the '172 Patent Reexamination at 25-26).

198. The J-CON system user could determine the price of parts from data maintained in its local automotive parts database and/or by electronically communicating with its distributor(s). (The J-CON Manual at Ch. 3, Sec. 2, Page 4; Non-Final rejection in the '172 Patent Reexamination at 25).

199. The J-CON system could perform a cross-referencing or converting of data relating to an item on the requisition to determine an alternative source for the same item and/or

an acceptable substitute for the item initially selected. (The J-CON Manual at Ch. 3, Sec. 2, Pages 6 & 11 & Ch. 3, Sec. 4, Pages 1-5; Final Rejection in the '683 Patent Reexamination at 13-14 & 35-36; Non-Final rejection in the '172 Patent Reexamination at 25-26).

200. Finally, the J-CON system could generate multiple purchase orders from a single requisition. (The J-CON Manual at Ch. 4, Sec. 3, Page 1 & Ch. 4, Sec. 4, Pages 1-7; Final Rejection in the '683 Patent Reexamination at 12; Non-Final rejection in the '172 Patent Reexamination at 23-24).

201. The J-CON Manual was not cited by the applicant or considered by the Examiner during prosecution of the patents-in-suit.

202. In the '516 Reexam Order, the Patent Office found "the J-CON Manual raises a substantial new question with respect to claims 1-29 of the '516 Patent. With respect to claim 16 of the '516 Patent, the J-CON Manual is seen to teach of a converting means for converting data relating to an item from a first catalog to data relating to an item from a second catalog [see Ch. 2, Sec. 1, Page 2, wherein "Interchange is J-CON's electronic cross-reference for parts ..."; also see Ch. 3, Sec. 1, Page 1, wherein "Interchange cross-references parts in lines you don't stock (called competitive parts) to parts in lines you do stock (called Interchange parts)."] With these sections, the J-CON Manual can be interpreted as converting data relating to an item from a first catalog to data relating to an item from a second catalog, as required in claim 16. Further, as noted above, this feature was the only feature mentioned in the original prosecution to be that of allowable subject matter for each of the claims. Therefore, the J-CON Manual is seen to raise a substantial new question of patentability that was not present in the prosecution of the application which became the '516 Patent. Further, there is a substantial likelihood that a Page 17 reasonable examiner would consider this teaching important in deciding whether or not the claims are patentable. Accordingly, the J-CON Manual raises a substantial new question of patentability as to claims 1-29, which question has not been decided in a previous examination of the '516 Patent." ('516 Reexam Order at 15-16).

U.S. Patent No. 5,319,542 (“King Jr. ’542”)

203. The ’542 Patent issued to IBM and enables a user to electronically search various catalogs for use in requisition systems. (’542 Patent at Fig. 3).

204. The ’542 Patent includes two major components: (1) Electronic Catalogs and (2) an Electronic Requisition. (’542 Patent at col. 2:17-19, col. 3:17-21).

205. The Electronic Catalogs consist of a Supplier Master Catalog from which the Supplier creates a Public Catalog and a Private Catalog. (’542 Patent at col. 3:41-58). A Public Database includes Public Catalogs from many Suppliers. (’542 Patent at col. 3:49-51).

206. The Customer can select either the Public Catalog or the Private Catalog to search. (’542 Patent at col. 5:42-45, col. 6:5-7). The Customer searches for items. (’542 Patent at Fig. 3, col. 5:42-45). Competitive items are simultaneously displayed and items from multiple suppliers may be compared. (’542 Patent at col. 2:20-26, col. 7:36-38). Selected items may then be requisitioned and purchased. (’542 Patent at col. 5:29-6:31).

207. In the ’516 Reexam Order, the Patent Office found: “it is also agreed that the consideration of the King ’542 Patent raises a substantial new question with respect to patented independent claim 9 of the ’516 Patent. Particularly, with respect to claim 9, the King ’542 Patent is seen to teach of an electronic sourcing system comprising a selection of one identification code from one of said first and second catalogs provides the other identification code from the other of said catalogs [see col. 2, lines 1-3, wherein “an object of the invention to provide an electronic catalog ordering system that allows the simultaneous display of competitive product information.”; also see col. 2, lines 25-49].” (’516 Reexam Order at 12-14).

U.S. Patent No. 4,992,940 (“Dworkin ’940”).

208. The ’940 Patent issued to H-Renee, Inc. and describes an “automated system [that] assists a user in locating and purchasing goods or services sold by a plurality of vendors. The system includes a programmed computer which is linked to a database. The database contains information about a large number of different products and/or services, arranged in various categories. For each product or service, the database contains information on price,

vendor, specifications and/or availability. In operating the system, the user first indicates the general type of product or service desired. . . . The computer then searches the database to retrieve all products or services, within the product or service category selected, having the specifications required by the user. The system display[s] such products or services to the user, who can request more detailed information about a particular product or service, or information on vendors and prices. The user can then select one or more items for immediate purchase, and the system automatically transmits the order to the appropriate vendor." ('941, Abstract).

209. The '940 patent database contains a collection of "catalogs" from a multitude of vendors and suppliers. ('940 Patent at 1:65-39, Abstract). For each item, the database includes a number which identifies the product, the name of the manufacturer, the manufacturer's model number for the product, the lowest price available among all the vendors in the database, the average price for the product for all the vendors in the database, and the list price for the product. Following each entry is a line giving additional information about the product. ('940, 6:26-43).

210. Users of the '940 system can search the catalog database. ('940, 4:45-47). For example, as shown in Fig. 3, the user has the choice of searching for 1) hardware products, 2) software products, or 3) software consultants. The user may then select criteria or specifications that will be used by the system to limit the search for items. ('940, 5:43-46). When the user has entered the specifications, the system searches the database for products that match the search criteria and then displays a list the search results. ('940, 6:11-17; 7:3-5).

211. The user is then given the option of ordering a product listed in the search results. If the user chooses to order a product, he or she is prompted to enter additional information, such as the identifying number of the supplier from which the user wants to buy, the user's name and address, credit card number, etc. ('940, 7:66-8:24).

212. When the system has all the information needed to process the order, it prints the required documentation, and prepares to have such documentation sent to the selected supplier. It may send the purchase order electronically. ('940, 8:25-35).

OBVIOUSNESS

The Combination of TV/2 Plus RIMS Renders the Asserted Claims Obvious

213. It is my opinion that RIMS as disclosed in the '989 patent anticipates all the Asserted Claims.

214. To the extent that RIMS as disclosed in the '989 patent is not deemed to anticipate any Asserted Claim, it is my opinion that such claim would have been obvious under 35 U.S.C. §103 in view of the combination of the Fisher RIMS system as described in the '989 patent and the RIMS brochure with the IBM TV/2 system as described in the 5799-IBM Technical Viewer/2, IBM Technical Viewer/2, General Information Manual, and IBM Technical Viewer/2 brochure.

215. The combination of these two systems, RIMS and TV/2 teaches all of the elements of asserted claims 3, 6, 26, 28, and 29 of the '683 patent, asserted claims 1, 2, 6, 9, 21, 22, and 29 of the '516 patent, and asserted claim 1 of the '172 patent as shown in Exhibits 3 and 4). As such, the combination of RIMS and TV/2 renders these claims invalid under 35 U.S.C. §103.

216. As stated in the patents in suit, the claimed electronic sourcing system "includes requisition/purchasing system 40, preferably but not necessarily the [prior art] Fisher RIMS system, and a search program 50 . . . Preferably, but not necessarily, the Technical Viewer 2 search program ("TV/2"), available from IBM, is used as search program 50." E.g. '683 patent 4:1-9.

217. The TV/2 documents include an explicit motivation to combine the Fisher RIMS and TV/2 systems. The IBM Technical Viewer/2 brochure teaches: "You can also create a 'shopping list' just by selecting items and passing that list to another application. For example, you might select parts to be ordered from the exploded drawings in the parts catalogue. The part list could then be sent directly to your parts ordering system . . ." (L0132133.) It also teaches: "Technical Viewer/2 is suitable for whole ranges of uses and industries in which information is supplied in large quantities and updated regularly, and where uses need fast access to precise

details. Potential uses include: Integrating part catalogues with dealers' computer systems such as order entry, inventory management and customer records" (L0132134.)

218. The RIMS system as described in the '989 patent is a part ordering system that allows order entry and inventory management. ('989 patent, 1:5-7 ("This invention generally relates to systems for requisition and inventory management."); '989 patent, 1:4-17 (Background explaining that the RIMS system is a requisition system, which generally "process purchase orders for items and track inventory."); 8:25-38 (discussing RIMS Parts Master record, which includes "part number")).

219. The TV/2 system was designed with an applications program interface (API) for interfacing the TV/2 system with other systems such as parts ordering systems, like RIMS. Thus, there is reason to combine the Fisher RIMS and TV/2 systems.

220. I understand that there will be testimony at trial to the effect that the patented invention resulted from customers asking Fisher Scientific to manage other types of product inventories other than the products that Fisher supplied, and to provide access to other supplier catalogs. This provided an obvious motive for one of ordinary skill in the art to combine the Fisher RIMS system and the TV/2 system, which was capable of searching for products from Fisher and non-Fisher catalogs and transmitting the results of such searches to a system such as the RIMS system. Indeed, Baxter Healthcare had recognized this need and provided this functionality in connection with the ASAP Express electronic sourcing system in mid-1980s.

221. The RIMS system and TV/2 systems were both designed to operate on the IBM OS/2 operating system platform, which further demonstrates that it would have been obvious to one of ordinary skill seeking to have a system with both extended searching capabilities and a requisition/purchasing system to combine the Fisher RIMS system with the TV/2 system. Dynamic data exchange (DDE) was the known, preferred protocol for exchanging information between applications operating on an OS/2 system.

222. The documents show and I understand that there will be testimony at trial to the effect that the process of creating an interface between TV/2 and RIMS applications was for the

most part straightforward and providing communication between the two was well within the capability of one of ordinary skill in the art. (ePLUS0221672-1693; ePLUS0214243-4265). Most of the time and work that was done on the interface was directed to optimizing the connection to achieve the desired performance and speed, or otherwise enhance or add features. However, none of these changes relate to the limitations of the claims at issue. The changes that were made to each of these systems were not radical and the systems when combined were not dramatically different from what they were before they were combined. In other words, they were the minor, obvious types of changes that are typically required when combining two programs to operate together. Several of these changes related not to making the systems work together, but rather to making the combined system work faster and better. However, such performance improvements are not part of the claimed invention, and thus are irrelevant to the obviousness issue. The most-time consuming part of the process was scanning in Fisher's 2000 page catalog and then cleaning up and formatting the scanned material and building in additional type of searching capabilities into TV/2, such as Boolean and sub-set searches. None of these specific details are required by the asserted claims. Building the interface, which was actually between three systems (TV/2, RIMS, and SPS), was estimated to take about 200 hours, which was a small fraction of the total time spent to build Fisher's sourcing system. (ePLUS0214259-4263). The fact that the process of building the commercial embodiment of the claimed invention was straightforward further supports obviousness.

The Combination of RIMS Plus Dworkin '940 Renders the Asserted Claims Obvious

223. It is my opinion that RIMS as disclosed in the '989 patent anticipates all the Asserted Claims.

224. To the extent that RIMS as disclosed in the '989 patent is not deemed to anticipate any Asserted Claim, it is my opinion that such claim would have been obvious in view of the combination of the Fisher RIMS system as described in the '989 patent and the RIMS brochure together with the Dworkin '940 patent. Such a combination teaches all of the elements of asserted claims 3, 6, 26, 28, and 29 of the '683 patent, asserted claims 1, 2, 6, 9, 21, 22, and 29

of the '516 patent, and asserted claim 1 of the '172 patent as shown in Exhibits 3 and 4). As such, the combination RIMS and the '940 patent renders these claims invalid under 35 U.S.C. §103.

225. One of skill in the art would have been motivated to combine the Fisher RIMS system with the '940 patent. The alleged improvement of RIMS over prior art sourcing systems was its ability to track just-in-time (JIT) inventory. '989 patent, 1:49-50. It therefore teaches combining inventory tracking with prior art sourcing systems.

226. The RIMS system allowed a user to purchase goods offered by plurality of sources (for example, Fisher and Promega as described above and as set forth in detail in Exhibit 3). However, I understand that in trying to distinguish the asserted claims from the RIMS system, ePlus will argue that the RIMS system was actually a “single source system” – that is, it allowed the customer to purchase only from the distributor that ran the RIMS system. While I disagree that RIMS was a “single source system” and dispute that the asserted claims require purchases to be made from different entities as interpreted by ePlus, it is my opinion that even if these were true, there was reason to combine the so-called single source system of RIMS with the '940 patent, which disclosed a system that “assists a user with locating and purchasing goods or services sold by a plurality of vendors.” ('940 patent, Abstract.)

227. By 1988, there were over fifty different automated order-entry/material management systems in the marketplace. (L0343536). As order efficiency decreased and logistical costs increased with multiple, incompatible systems, customers became interested in multi-vendor systems. (L0343536-537; L0340565). A multi-vendor system could reduce logistical costs by 10% and provide the advantages of consolidated data. (L0340565). Consolidating information about multiple vendors removed the need for customers to consult hundreds or thousands of vendor catalogs to find the best price for an item. ('940 patent, 1:14-60.) Baxter Healthcare offered a multiple-vendor electronic sourcing system in the late-1980s, years before the patents-in-suit were filed. Thus, even if the Fisher RIMS system as described in

the '989 patent was single-source and the asserted claims require purchases from multiple sources, market pressure would provide a motivation to combine RIMs with the '940 patent.

228. During prosecution of the '683 and '516 patents, the Patent Office found that the '940 disclosed all of the claim elements except: 1) converting items found in one vendor's catalog to another vendor; and 2) searching only portions of a catalog database. During the prosecution of the '172 patent, the Applicant argued that Dworkin did not teach a single requisition that could include multiple items and be sourced to different vendors. It is my opinion that the RIMS system teaches these missing elements (as described more fully in Exhibits 3 and 4). Additionally, the '940 patent at least implicitly recognized a need to search a subset of the database – it required a user to first select a category of items to search (hardware vs. software). Thus, it would have been obvious to combine the teaching of RIMS that allowed users to search portions of the RIMS database (see exhibit 3). Further, the '940 patent recognized that items might have two product numbers (a number identifying the product in the database and a manufacturer's model number), thus it would have been obvious to combine the '940 patent with the cross-reference table in RIMS to associate these different numbers together. Finally, to the extent that the '940 patent is deemed not to teach a single requisition that could include multiple items and generate multiple purchase orders (I believe it does teach this element as shown in Exhibit 3), it would have been obvious to combine it with RIMS which teaches multiple purchase orders from a single requisition ('989 patent, Fig. 5A).

The Combination of J-CON Plus Dworkin '940 Renders the Asserted Claims Obvious

229. It is my opinion that J-CON anticipates all the Asserted Claims.

230. To the extent that J-CON is not deemed to anticipate any Asserted Claim, it is my opinion that such claim would have been obvious in view of the combination of J-CON with the Dworkin '940 patent. The combination teaches all of the elements of asserted claims 3, 6, 26, 28, and 29 of the '683 patent, asserted claims 1, 2, 6, 9, 21, 22, and 29 of the '516 patent, and asserted claim 1 of the '172 patent as shown in Exhibits 3 and 4). As such, the combination of J-Con and the '940 patent renders these claims invalid under 35 U.S.C. §103.

231. One of skill in the art would have been motivated to make the combination because

232. One of skill in the art would also have been motivated to make the combination because the '940 patent states, "It is another object to provide a system and method which facilitates the processing of orders for goods or services transmitted by a user." 3:9-11. This capability is provided by J-CON.

233. Furthermore, the'940 patent provided the multi-source capability demanded by the industry at and before the time of the invention.

234. Additionally, the J-CON system included features that one or ordinary skill in the art would have been motivated to use with the '940 invention, including the ability to electronically determine the current availability in the inventory at multiple locations, to perform a cross-referencing of data relating to an item on a requisition to determine an alternative source for the same item and/or an acceptable substitute for the item initially selected, and the ability to generate multiple purchase orders from a single requisition (as described above and in detail in Exhibit 3).

The Combination of J-CON and P.O. Writer Renders the Asserted Claims Obvious

235. It is my opinion that J-CON anticipates all the Asserted Claims. It is also my opinion that P.O. Writer anticipates all of the asserted claims.

236. To the extent that J-CON and/or P.O. Writer are not deemed to anticipate any Asserted Claim, it is my opinion that such claim would have been obvious in view of the combination of J-CON with P.O. Writer. The same reasons for making the previous two combinations apply to combining the J-CON system as described in the "J-CON Manual" with P.O. Writer Plus V. 10 as described in the P.O. Writer Plus Manual. The P.O. Writer Plus V. 10 system provided the multi-vendor capability demanded by the industry at and before the time of the invention. The J-CON system included features that one or ordinary skill in the art would have been motivated to use with the PO Writer system, including additional details about

performing a cross-referencing of data relating to an item on a requisition to determine an alternative source for the same item and/or an acceptable substitute for the item initially selected.

The Combination of J-CON and Gateway Renders the Asserted Claims Obvious

237. It is my opinion that J-CON anticipates all the Asserted Claims. It is also my opinion that the Gateway 2000/MRO system anticipates all of the asserted claims.

238. To the extent that J-CON and/or Gateway are not deemed to anticipate any Asserted Claim, it is my opinion that such claim would have been obvious in view of the combination of J-CON with Gateway. The same reasons for making the previous three combinations apply to combining the J-CON system with the Gateway system.

239. Additionally, the J-CON system had a sophisticated system for keeping track of equivalent items, dividing them into "Replaced Parts," "Substitute Parts," and "Can-Use Parts" and a number of different methods of converting among item numbers and substituting alternate parts that one of ordinary skill would have been motivated to use with the Gateway system. (See, e.g., L0124837; L0123551). Similarly, the Gateway Manual discloses in detail how to select a subset of catalogs from a collection of catalogs and then limit a search for items to the selected subset of catalogs, which one of ordinary skill would have been motivated to use with J-CON system. (See, e.g., SAP_2531709-10, SAP_2531615-16, L0128380).

Secondary Considerations

240. I understand that ePlus contends that secondary considerations demonstrate that the invention is not obvious. (See, e.g., "Plaintiff ePlus Inc.'s First Supplemental Answers and Objections to Defendant Lawson Software, Inc.'s Second Set of Interrogatories" (hereinafter, "Rog. 6").) I understand that ePlus will allege commercial success, demand for the patented product, and praise by others. While I reserve the right to reply to these arguments after I have reviewed ePlus's expert report, the evidence ePlus intends to present (as I currently understand it) does not demonstrate a nexus between these secondary considerations and the claimed invention.

241. ePlus correctly observes that businesses benefit from efficient procurement. (Rog. 6, pp. 12-13). However, numerous prior art system existed that automated the procurement process, as described earlier in this report. Therefore, even if the claimed inventions also accomplish this goal, that is not evidence of nonobviousness. Quite the opposite. The fact that numerous artisans built, used and patented a variety of automated procurement system is evidence of obviousness because it tends to show contemporaneous invention by others.

242. ePlus asserts, speaking of the prior art, that “since the electronic catalogs were limited to a single vendor's product, comparison shopping among different vendors could not be conducted.” (Rog. 6, p. 13). This statement is incorrect. At least the following prior art systems allowed comparison shopping among multiple vendors: Johnson '989, P.O. Writer, SABRE, Gateway, J-CON, TV/2, King '542, Doyle '551, and Dworkin '940.

243. ePlus asserts that “there was a long-felt, but unmet need for an electronic sourcing system and process that could integrate product information, such as is typically found in vendor catalogs that are provided to customers and requisition and ordering systems that could use the results of searches of product information in vendor catalogs.” (Rog. 6, p. 13). This statement is incorrect. The aforementioned prior art systems provided such integration.

244. ePlus asserts that “there was a need to provide an electronic sourcing system that was capable of conducting searches of product catalogs of multiple vendors and transferring information about items selected from the results of a vendor catalog database search … to a requisition building module for inclusion of the catalog items as entries in a requisition generated by the system.” (Rog. 6, p. 13). Such a need, to the extent it ever existed, was amply satisfied by prior art systems.

245. ePlus asserts that “Moreover, such an electronic sourcing system would enable the automation of necessary approvals that may be required with respect to a requisition prior to placing an order with a vendor.” (Rog. 6, p. 14). Such a capability, even if needed and even if

satisfied by the alleged inventions, is not claimed in the Asserted Claims. Therefore, the assertion in no way tends to show that the Asserted Claims are nonobvious.

246. ePlus asserts that “The inventors recognized that the electronic sourcing system could also include databases having vendors' inventory information or other inventory determination means so that, for a particular selected item from a catalog database search, the system could determine its availability in the inventory of a vendor.” (Rog. 6, p 14). Even if the inventors had that realization, so did numerous others before them. Such a capability was provided by at least the following prior art systems: Johnson '989, P.O. Writer, SABRE, Gateway, J-CON, Doyle '551 and Dworkin '940.

247. ePlus asserts that “If a particular vendor was out-of-stock with respect to a selected item, the inventors recognized that the system should be capable of finding another item available from a different vendor in another vendor catalog by means of, for example, a database which identifies cross-referenced items.” (Rog. 6, p. 14). Even if the inventors had that realization, so did numerous others before them. Such a capability was provided by at least the following prior art systems: Johnson '989, SABRE, Gateway, J-CON and Dworkin '940.

248. ePlus asserts that it received various awards and that these are evidence of nonobviousness. (Rog. 6, pp. 14-16). ePlus is unable to establish any nexus between these awards and the inventions of the Asserted Claims. I note that none of the cited awards mentions any of ePlus's patents or inventions. For example, ePlus points to the “Internet and Electronic Commerce Conference (iEC) Award for Best Internet Infrastructure” award Fisher won in March 1997. ePLUS 0134639-40. The award citation refers to the fact that “Procure Net enables vendors to create electronic storefronts to display and sell their products over the Internet. Fisher's electronic mall interfaces directly to participants' legacy systems-order entry, customer service, inventory-to fulfill and complete the purchasing process.” There is no Asserted Claim that refers in any way to an electronic mall or tying an electronic storefront to legacy systems. In fact, the quotation specifically mentions that procurement is not performed by ProcureNet, but

by the user's own legacy system. There is no nexus between this award and the Asserted Claims, so it is not evidence of nonobviousness.

249. ePlus refers to an "Aberdeen White Paper" that indicated that "adopters of e-Procurement technology realized a 5 to 10% cost reduction in the prices of the non-production goods purchased." I note that the Aberdeen White Paper makes no mention of Fisher, ePlus or the asserted patents. It generically concludes that e-Procurement can result in significant cost savings. Even assuming this to be true, there were numerous prior art e-procurement systems in existence and there is no nexus between the Aberdeen White Paper and the Asserted Claims.

250. ePlus asserts that "Lawson has recognized the benefits achieved by automating the e-procurement process as claimed in the patented inventions." (Rog. 6, p. 15). However, ePlus has failed to mention the fact that Lawson operated an e-procurement system of its own that is prior art to the asserted patents.

251. ePlus asserts that "*ePlus* was named one of the 2003 and 2004 Supply & Demand Chain Executive 100 List of Leading Supply Chain Product Providers. *See, e.g.*, ePLUS0027032-33." (Rog. 6, p. 16). However, the cited reference is a press release authored by ePlus itself. The website of Supply & Demand Chain Executive magazine explained the criteria used to determine the top 100¹: "The 'Top 100' are selected by the magazine's editorial staff and advisors based on information submitted by solution providers. The criteria for the selection process were derived from those factors that the magazine's readers have indicated matter most as they consider possible solutions to enable their supply and demand chains today, including stability, industry knowledge and expertise, return on investment and innovation." Thus the award was based on ePlus's own submission. Further, inclusion in the list establishes no nexus with the Asserted Claims.

252. ePlus asserts that "in 2003, *ePlus* was ranked #1 on the Aberdeen Group's Supply Chain 50 Report as the leading supply chain management technology provider for its suite of electronic procurement and procurement catalog content management products and services that

¹ See [http://www.sdcexec.com/web/online/Trends/Turning-the-Spotlight-on-Top-Supply-and-Demand-Chain-Enablers/20\\$5310](http://www.sdcexec.com/web/online/Trends/Turning-the-Spotlight-on-Top-Supply-and-Demand-Chain-Enablers/20$5310)

can be used to support customers' strategic sourcing and management initiatives." (Rog. 6, p. 16). The document cited in support of this statement, ePLUS0026955-57, is ePlus's own press release. The actual criteria used by the Aberdeen Group in its Supply Chain 50 Reports are listed on the Aberdeen Group's website²: "The SC 50 rewards companies that show significant results in Overall dollar increase in revenue, Revenue growth in proportion to their own size, Profitability posture and improvements, Gaining market share." There is no mention of any technology, products or innovations. The ranking is based purely on financial factors, regardless of ePlus's assertions in its press release.

253. ePlus asserts that "The iSource 100 list recognized *ePlus* for its innovative Enterprise Cost Management platform which includes its suite of electronic procurement, product and catalog content management products." The document cited in support of this statement, ePLUS 0026860-61, is ePlus's own press release. The actual criteria used by iSource were announced in its own press release dated June 2, 2003³: "The iSource 100 are enabling organizations and consulting organizations with innovative, enterprise-wide solutions and services that are leading the way in helping traditional companies make their supply and demand chains more effective and efficient." The fact that all 100 companies on the list met these criteria and all were supply chain companies negates any inference that ePlus had any unique offering. Even if ePlus somehow manages to show a nexus between the Asserted Claim and its appearance on the iSource 100, if 99 other companies had offerings of equal stature, that tends to show obviousness through contemporaneous invention by others.

254. Rog. 6, p. 17 deals with supposed licensing of the patented technology by others. I understand that SAP and Ariba took licenses in connection with settlement of hotly contested litigation.

255. The fact that ePlus as a company has enjoyed commercial success, even if true, does not establish that any success is tied to the Asserted Claims. Many companies enjoy commercial success but own no patents at all, so mere commercial success is certainly not

² See <http://v1.aberdeen.com/summary/report/sca/sc50method.asp>

³ See <http://www.cincom.com/us/eng/news/news-room/news-releases/search/newsDetailDisplay.jsp?recordId=472>

indicative of non-obviousness of anything unless some nexus can be shown between the Asserted Claims and the success. Furthermore, I understand that only a small percentage of the revenue of ePlus is derived from products covered by the asserted patents, and such revenue has been relatively flat for several years, so ePlus will not be able to tie any “success” to the Asserted Claims.

256. At Rog. 6, pp. 17-18, ePlus attempts to establish skepticism by others. But the cited quotation from FTG’s chief executive does not do that. He merely says that “Most buyers and suppliers hadn’t modified their business process to facilitate electronic commerce.” That does not establish skepticism. Furthermore, there is no evidence that anyone was skeptical that the inventions of the Asserted Claims could be made.

257. The ePlus website states that “ePlus’ products are covered by one or more of the following: U.S. Patent Nos. 6,023,683; 6,055,516; 6,505,172; 6,892,185; 6,182,127; 6,510,459; 7,047,211; 7,185,069; 7,254,581 and corresponding foreign and patents pending.”⁴ Of the nine U.S. patents listed, only the first three are asserted in this litigation. ePlus has not shown that any success it may have relates to the specific patents asserted in this case. Furthermore, the ePlus products offer features that do not appear in the Asserted Claims, or anywhere else in the asserted patents. These include⁵:

Approval Workflow - No matter how many approvals are required, Procure+ routes requisitions and blanket order releases through the process via email in minutes.

Budget Checking - It’s better to check fund availability before an order is issued than get an end of month report on overruns. Supports multiple allocations per line item.

Sourcing and Bidding - RFQs, reverse auctions, and bid analysis are included.

Receiving - Deliveries can be recorded at the desktop or at a central location.

Invoice Matching - Also available in Procure+ Enterprise Edition, this module provides a three way match with existing purchase order and receipt information.

Evaluated Receipt Settlement (ERS) - This process issues payment approvals to trusted vendors when goods or services are received, bypassing invoices.

⁴ See http://www.eplus.com/legal_notices.htm

⁵ See http://www.eplus.com/eprocurement_features.htm

Reporting - Every transaction in the ordering process is stored and viewable within Procure+, including audit trails and departmental and management reports.

Navigator+ and Queries - Users can define their own queries plus build and store their own workspaces, showing only those transactions that need their attention.

258. I do not see any connection between the Asserted Claims and the secondary considerations cited by ePlus in Rog. 6. In the event that ePlus or its experts come forward with any additional assertions of nonobviousness, I reserve the right to respond to them.

CONCLUSIONS

259. None of the Asserted Claims is valid.
260. All the Asserted Claims are anticipated, as explained in Exhibits 3 and 4.
261. All the Asserted Claims are also obvious in light of single references, as explained in Exhibits 3 and 4.
262. All the Asserted Claims are also obvious in light of combinations of at most two references, as explained in the main body of this report.
263. Applicants did not invent e-procurement software.
264. Applicants did not invent requisition/purchasing software.
265. Applicants did not invent electronic sourcing systems.
266. Applicants did not invent multiple source electronic sourcing systems.
267. Applicants did not invent a searchable collection of product catalogs.
268. Applicants did not invent search engines for searching parts lists or product catalogs.

269. Plaintiff has not demonstrated secondary considerations sufficient to negate the obviousness of any Asserted Claim.

270. All the Asserted Claims, as detailed above and in Exhibits 3 and 4, are invalid as indefinite.

271. The following claims, as detailed above and in Exhibits 3 and 4, are invalid as lacking written description:

'516 claims 1, 2, 6, 9, 21, 22, 29.

'683 claims 3, 6, 28, 29.

272. The following claims, as detailed above and in Exhibits 3 and 4, are invalid as lacking enablement:

'516 claims 1, 2, 6, 9, 21, 22, 29.

273. The following claims, as detailed above and in Exhibits 3 and 4, are invalid as not reciting statutory subject matter, also including hybrid claims:

'516 claims 1, 2, 6, 9, 21, 22, 29.

Executed on May 5, 2010, in Pittsburgh, PA.



Michael Ian Shamos

Michael Ian Shamos, Ph.D., J.D.

Exhibit 1
Materials Considered

Deposition Transcripts

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Plaintiff ePlus, Inc.'s Claim Chart and Appendix A-C dated December 22, 2009
Plaintiff ePlus, Inc.'s First Supplemental Answers and Objections to Defendant Lawson Software, Inc.'s Second Set of Interrogatories (No. 6)
Plaintiff ePlus, Inc.'s Opening Claim Construction Brief, Declaration of Young with Exhibits
Plaintiff ePlus, Inc.'s Responsive Claim Construction Brief with Exhibits 20-22, Supplemental Declaration of Young
Plaintiff ePlus, Inc.'s Supplemental Memorandum in Support of Its Construction of Certain Means-Plus-Function Claim Elements with Exhibits 1-8 and Declaration of Weaver
Plaintiff's Claim Construction Presentation, January 22, 2010
Plaintiff's Identification of Asserted Twenty Claims
Plaintiff's Identification of Thirteen Claims to be Asserted
Protective Order of August 27, 2009

Litigation Documents (Prior Litigation)

Claim Constructions Pursuant to November 17, 2005 *Markman* Hearing, ePLUS0235079-094
Memorandum Opinion (Markman, Ariba Case), ePLUS0232958-980

Other Litigation Documents

L0128367-0128395
L0126104-0126146
L0340559-0340571
L0343527-0343543
Order Entry Conversion, L0012518-0012553
Order Entry Procedures, L0012600-0012700
RIMS Trademark File History, L0260585-00260624
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Patents and Patent Applications

Brockwell et al. U.S. Patent 5,063,506
Doyle et al. U.S. Patent 5,694,551
Dworkin et al. U.S. Patent 4,992,940
Gardner et al. U.S. Patent 5,758,327
Geier et al. U.S. Patent 4,984,155
Johnson et al. U.S. Patent 5,712,989
Johnson et al. U.S. Patent 6,023,683 and its prosecution history
Johnson et al. U.S. Patent 6,055,516 and its prosecution history
Johnson et al. U.S. Patent 6,505,172 and its prosecution history
King Jr. et al. U.S. Patent 5,319,542
Linnett et al. U.S. Patent 5,301,326
Roberts et al. U.S. Patent 5,324,922
Shavit et al. U.S. Patent 4,799,156
Shoquist et al. U.S. Patent 5,361,199
Spiegelhoff et al. U.S. Patent 5,402,336
Zellweger U.S. Patent 5,630,125

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Richmond Division**

ePLUS, INC.,)
)
)
) Civil Action No. 3:09-cv-620
Plaintiff,)
)
)
v.)
)
)
LAWSON SOFTWARE, INC.)
)
)
Defendant.)

CERTIFICATE OF SERVICE

I hereby certify that on May 7, 2010, I caused the following documents:

1. Report of Expert Michael I. Shamos, Ph.D., J.D., Concerning Invalidity (Corrected) with Exhibits 1-4; (Exhibit 3 Corrected) and
2. Certificate of Service

to be served on the following individuals via electronic mail:

Goodwin Proctor ePlus team at ePlusGoodwinService@goodwinprocter.com
Craig Merritt at cmerritt@cblaw.com
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Dated: May 7, 2010

s/ Kaye T. Holst
Kaye T. Holst